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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

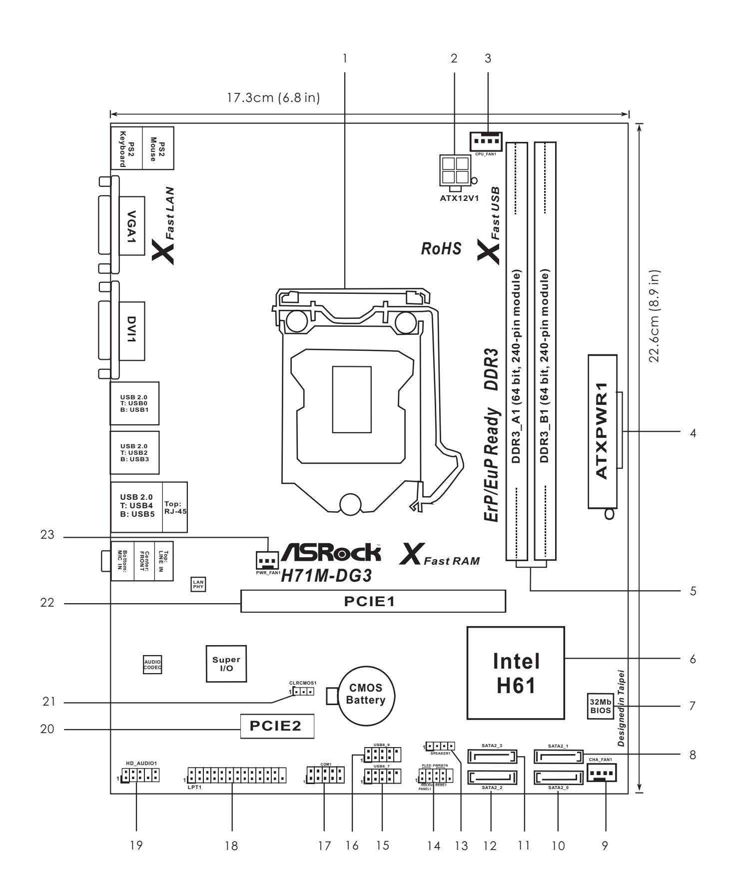
The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see
www.dtsc.ca.gov/hazardouswaste/perchlorate"

ASRock Website: http://www.asrock.com

Published April 2012

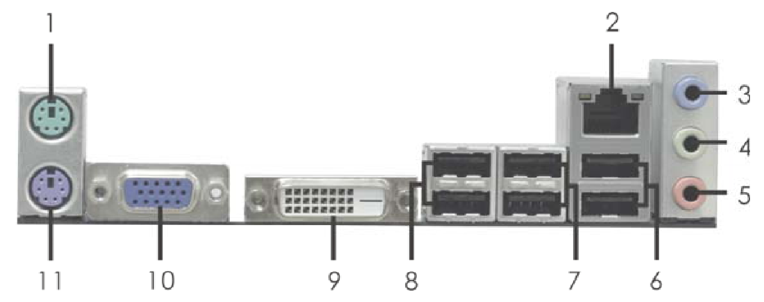
English

Motherboard Layout



1	1155-Pin CPU Socket
2	ATX 12V Power Connector (ATX12V1)
3	CPU Fan Connector (CPU_FAN1)
4	ATX Power Connector (ATXPWR1)
5	2 x 240-pin DDR3 DIMM Slots (Dual Channel: DDR3_A1, DDR3_B1, Blue)
6	Intel H61 Chipset
7	32Mb SPI Flash
8	SATA2 Connector (SATA2_1, Blue)
9	Chassis Fan Connector (CHA_FAN1)
10	SATA2 Connector (SATA2_0, Blue)
11	SATA2 Connector (SATA2_3, Blue)
12	SATA2 Connector (SATA2_2, Blue)
13	Chassis Speaker Header (SPEAKER 1, White)
14	System Panel Header (PANEL1, White)
15	USB 2.0 Header (USB6_7, Blue)
16	USB 2.0 Header (USB8_9, Blue)
17	COM Port Header (COM1)
18	Print Port Header (LPT1, White)
19	Front Panel Audio Header (HD_AUDIO1, White)
20	PCI Express 2.0 x1 Slot (PCIE2, White)
21	Clear CMOS Jumper (CLRCMOS1)
22	PCI Express 3.0 x16 Slot (PCIE1, Blue)
23	Power Fan Connector (PWR_FAN1)

I/O Panel



1	PS/2 Mouse Port (Green)	7	USB 2.0 Ports (USB23)
* 2	LAN RJ-45 Port	8	USB 2.0 Ports (USB01)
3	Line In (Light Blue)	9	DVI-D Port
** 4	Front Speaker (Lime)	10	D-Sub Port
5	Microphone (Pink)	11	PS/2 Keyboard Port (Purple)
6	USB 2.0 Ports (USB45)		

* There are two LED next to the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications

Activity/Link LED

Status	Description
Off	No Link
Blinking	Data Activity
On	Link

SPEED LED

Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection



LAN Port

** To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. Please refer to below steps for the software setting of Multi-Streaming.

For Windows® XP:

After restarting your computer, you will find "Mixer" tool on your system. Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok". Choose "2CH" or "4CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker and Front Speaker, or select "Realtek HDA Audio 2nd output" to use front panel audio. Then reboot your system.

For Windows® 7 / Vista™:

After restarting your computer, please double-click "Realtek HD Audio Manager" on the system tray. Set "Speaker Configuration" to "Quadraphonic" or "Stereo". Click "Device advanced settings", choose "Make front and rear output devices playbacks two different audio streams simultaneously", and click "ok". Then reboot your system.

English

1. Introduction

Thank you for purchasing ASRock ***H71M-DG3*** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

This Quick Installation Guide contains introduction of the motherboard and step-by-step installation guide. More detailed information of the motherboard can be found in the user manual presented in the Support CD.



Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well.
ASRock website http://www.asrock.com
If you require technical support related to this motherboard, please visit our website for specific information about the model you are using.
www.asrock.com/support/index.asp

1.1 Package Contents

ASRock ***H71M-DG3*** Motherboard
(Micro ATX Form Factor: 8.9-in x 6.8-in, 22.6 cm x 17.3 cm)
ASRock ***H71M-DG3*** Quick Installation Guide
ASRock ***H71M-DG3*** Support CD
2 x Serial ATA (SATA) Data Cables (Optional)
1 x I/O Panel Shield



ASRock Reminds You...
To get better performance in Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit, it is recommended to set the BIOS option in Storage Configuration to AHCI mode. For the BIOS setup, please refer to the "User Manual" in our support CD for details.

English

1.2 Specifications

Platform	- Micro ATX Form Factor: 8.9-in x 6.8-in, 22.6 cm x 17.3 cm - All Solid Capacitor design
CPU	- Supports 3rd and 2nd Generation Intel® Core™ i7 / i5 / i3 in LGA1155 Package - Supports Intel® Turbo Boost 2.0 Technology - Supports K-Series unlocked CPU - Supports Hyper-Threading Technology (see **CAUTION 1**)
Chipset	- Intel® H61 - Supports Intel® Rapid Start Technology and Smart Connect Technology
Memory	- Dual Channel DDR3 Memory Technology (see **CAUTION 2**) - 2 x DDR3 DIMM slots - Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory (DDR3 1600 with Intel® Ivy Bridge CPU, DDR3 1333 with Intel® Sandy Bridge CPU) - Max. capacity of system memory: 16GB (see **CAUTION 3**) - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2 with Intel® Ivy Bridge CPU
Expansion Slot	- 1 x PCI Express 3.0 x16 slot (blue @ x16 mode) * PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0. - 1 x PCI Express 2.0 x1 slot
Graphics	* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. - Supports Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 with Intel® Ivy Bridge CPU - Supports Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) with Intel® Sandy Bridge CPU - Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU. - Max. shared memory 1760MB with Intel® Ivy Bridge CPU. Max. shared memory 1759MB with Intel® Sandy Bridge CPU. (see **CAUTION 4**)

English

	- Dual VGA Output: support DVI-D and D-Sub ports by independent display controllers - Supports DVI with max. resolution up to 1920x1200 @ 60Hz - Supports D-Sub with max. resolution up to 2048x1536 @ 75Hz - Supports HDCP function with DVI port - Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with DVI port
Audio	- 5.1 CH HD Audio (Realtek ALC662 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111C - Supports Wake-On-LAN - Supports PXE
Rear Panel I/O	I/O Panel - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x D-Sub Port - 1 x DVI-D Port - 6 x Ready-to-Use USB 2.0 Ports - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Line in/Front Speaker/Microphone
Connector	- 4 x SATA2 3.0 Gb/s connectors, support NCQ, AHCI and Hot Plug functions - 1 x Print Port header - 1 x COM port header - CPU/Chassis/Power FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports)
BIOS Feature	- 32Mb AMI BIOS - AMI UEFI Legal BIOS with GUI support - Supports “Plug and Play” - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage Multi-adjustment

Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Creative Sound Blaster X-Fi MB - Trial, ASRock MAGIX Multimedia Suite - OEM
Unique Feature	- ASRock Extreme Tuning Utility (AXTU) (see **CAUTION 5**) - ASRock Instant Boot - ASRock Instant Flash (see **CAUTION 6**) - ASRock APP Charger (see **CAUTION 7**) - ASRock SmartView (see **CAUTION 8**) - ASRock XFast USB (see **CAUTION 9**) - ASRock XFast LAN (see **CAUTION 10**) - ASRock XFast RAM (see **CAUTION 11**) - Hybrid Booster: - ASRock U-COP (see **CAUTION 12**) - Boot Failure Guard (B.F.G.) - Combo Cooler Option (C.C.O.) (see **CAUTION 13**)
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant (see **CAUTION 14**)
Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required) (see **CAUTION 15**)

* For detailed product information, please visit our website: http://www.asrock.com

WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

English

CAUTION!

1. About the setting of “Hyper Threading Technology”, please check page 40 of “User Manual” in the support CD.
2. This motherboard supports Dual Channel Memory Technology. Before you implement Dual Channel Memory Technology, make sure to read the installation guide of memory modules on page 14 for proper installation.
3. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 7 / Vista™ / XP. For Windows® OS with 64-bit CPU, there is no such limitation. You can use ASRock XFast RAM to utilize the memory that Windows® cannot use.
4. The maximum shared memory size is defined by the chipset vendor and is subject to change. Please check Intel® website for the latest information.
5. ASRock Extreme Tuning Utility (AXTU) is an all-in-one tool to fine-tune different system functions in a user-friendly interface, which is including Hardware Monitor, Fan Control, Overclocking, OC DNA and IES. In Hardware Monitor, it shows the major readings of your system. In Fan Control, it shows the fan speed and temperature for you to adjust. In Overclocking, you are allowed to overclock CPU frequency for optimal system performance. In OC DNA, you can save your OC settings as a profile and share with your friends. Your friends then can load the OC profile to their own system to get the same OC settings. In IES (Intelligent Energy Saver), the voltage regulator can reduce the number of output phases to improve efficiency when the CPU cores are idle without sacrificing computing performance. Please visit our website for the operation procedures of ASRock Extreme Tuning Utility (AXTU).
   ASRock website: http://www.asrock.com
6. ASRock Instant Flash is a BIOS flash utility embedded in Flash ROM. This convenient BIOS update tool allows you to update system BIOS without entering operating systems first like MS-DOS or Windows®. With this utility, you can press <F6> key during the POST or press <F2> key to BIOS setup menu to access ASRock Instant Flash. Just launch this tool and save the new BIOS file to your USB flash drive, floppy disk or hard drive, then you can update your BIOS only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system.

7. If you desire a faster, less restricted way of charging your Apple devices, such as iPhone/iPod/iPad Touch, ASRock has prepared a wonderful solution for you - ASRock APP Charger. Simply installing the APP Charger driver, it makes your iPhone charged much quickly from your computer and up to 40% faster than before. ASRock APP Charger allows you to quickly charge many Apple devices simultaneously and even supports continuous charging when your PC enters into Standby mode (S1), Suspend to RAM (S3), hibernation mode (S4) or power off (S5). With APP Charger driver installed, you can easily enjoy the marvelous charging experience than ever.
   ASRock website: http://www.asrock.com/Feature/AppCharger/index.asp
8. SmartView, a new function of internet browser, is the smart start page for IE that combines your most visited web sites, your history, your Facebook friends and your real-time newsfeed into an enhanced view for a more personal Internet experience. ASRock motherboards are exclusively equipped with the SmartView utility that helps you keep in touch with friends on-the-go. To use SmartView feature, please make sure your OS version is Windows® 7 / 7 64 bit / Vista™ / Vista™ 64 bit, and your browser version is IE8. ASRock website: http://www.asrock.com/Feature/SmartView/index.asp
9. ASRock XFast USB can boost USB storage device performance. The performance may depend on the property of the device.
10. ASRock XFast LAN provides a faster internet access, which includes below benefits. LAN Application Prioritization: You can configure your application priority ideally and/or add new programs. Lower Latency in Game: After setting online game priority higher, it can lower the latency in game. Traffic Shaping: You can watch Youtube HD video and download files simultaneously. Real-Time Analysis of Your Data: With the status window, you can easily recognize which data streams you are currently transferring.
11. ASRock XFast RAM fully utilizes the memory space that cannot be used under Windows® OS 32-bit CPU. It also shortens the loading time of previously visited websites, making web surfing faster than ever. And it also boosts the speed of Adobe Photoshop 5 times faster. Another advantage of ASRock XFast RAM is that it reduces the frequency of accessing your SSDs or HDDs in order to extend their lifespan.
12. While CPU overheat is detected, the system will automatically shutdown. Before you resume the system, please check if the CPU fan on the motherboard functions properly and unplug the power cord, then plug it back again. To improve heat dissipation, remember to spray thermal grease between the CPU and the heatsink when you install the PC system.
13. Combo Cooler Option (C.C.O.) provides the flexible option to adopt three different CPU cooler types, Socket LGA 775, LGA 1155 and LGA 1156. Please be noticed that not all the 775 and 1156 CPU Fan can be used.

14. ASRock XFast RAM is not supported by Microsoft® Windows® XP / XP 64-bit.
15. EuP, stands for Energy Using Product, was a provision regulated by European Union to define the power consumption for the completed system. According to EuP, the total AC power of the completed system shall be under 1.00W in off mode condition. To meet EuP standard, an EuP ready motherboard and an EuP ready power supply are required. According to Intel's suggestion, the EuP ready power supply must meet the standard of 5v standby power efficiency is higher than 50% under 100 mA current consumption. For EuP ready power supply selection, we recommend you checking with the power supply manufacturer for more details.

2. Installation_

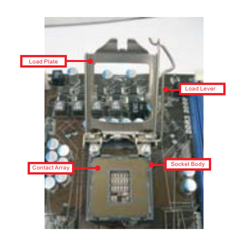
Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.

1. Unplug the power cord from the wall socket before touching any component. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded antstatic pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

2.1 CPU Installation

For the installation of Intel 1155-Pin CPU, please follow the steps below.



1155-Pin Socket Overview



Before you insert the 1155-Pin CPU into the socket, please check if the CPU surface is unclean or if there is any bent pin on the socket. Do not force to insert the CPU into the socket if above situation is found. Otherwise, the CPU will be seriously damaged.

English

Step 1. Open the socket:

Step 1-1. Disengaging the lever by depressing down and out on the hook to clear retention tab.



Step 1-2. Rotate the load lever to fully open position at approximately 135 degrees.

Step 1-3. Rotate the load plate to fully open position at approximately 100 degrees.



Step 2. Remove PnP Cap (Pick and Place Cap).





1. It is recommended to use the cap tab to handle and avoid kicking off the PnP cap.
2. This cap must be placed if returning the motherboard for after service.

Step 3. Insert the 1155-Pin CPU:

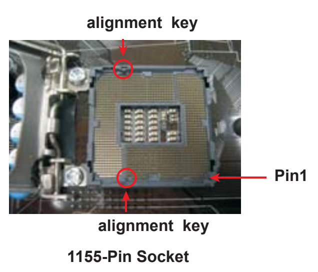
Step 3-1. Hold the CPU by the edges where are marked with black lines.



Step 3-2. Orient the CPU with IHS (Integrated Heat Sink) up. Locate Pin1 and the two orientation key notches.



1155-Pin CPU



1155-Pin Socket



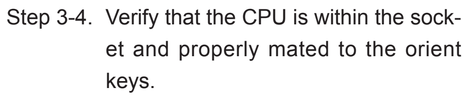
For proper inserting, please ensure to match the two orientation key notches of the CPU with the two alignment keys of the socket.

English

Step 3-3. Carefully place the CPU into the socket by using a purely vertical motion.



Step 3-4. Verify that the CPU is within the socket and properly mated to the orient keys.



Step 4. Close the socket:



Step 4-1. Rotate the load plate onto the IHS.

Step 4-2. While pressing down lightly on load plate, engage the load lever.

Step 4-3. Secure load lever with load plate tab under retention tab of load lever.



2.2 Installation of CPU Fan and Heatsink

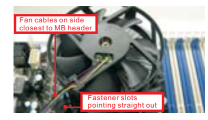
For proper installation, please kindly refer to the instruction manuals of your CPU fan and heatsink.

Below is an example to illustrate the installation of the heatsink for 1155-Pin CPU.

Step 1. Apply thermal interface material onto center of IHS on the socket surface.

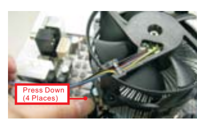


Step 2. Place the heatsink onto the socket. Ensure fan cables are oriented on side closest to the CPU fan connector on the motherboard (CPU_FAN1, see page 2, No. 3).



Step 3. Align fasteners with the motherboard through-holes.

Step 4. Rotate the fastener clockwise, then press down on fastener caps with thumb to install and lock. Repeat with remaining fasteners.





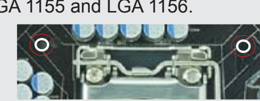
If you press down the fasteners without rotating them clockwise, the heatsink cannot be secured on the motherboard.

Step 5. Connect fan header with the CPU fan connector on the motherboard.

Step 6. Secure excess cable with tie-wrap to ensure cable does not interfere with fan operation or contact other components.



Please be noticed that this motherboard supports Combo Cooler Option (C.C.O.), which provides the flexible option to adopt three different CPU cooler types, Socket LGA 775, LGA 1155 and LGA 1156. The white throughholes are for Socket LGA 1155/1156 CPU fan.



2.3 Installation of Memory Modules (DIMM)

This motherboard provides two 240-pin DDR3 (Double Data Rate 3) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install two identical (the same brand, speed, size and chip-type) memory modules in the DDR3 DIMM slots to activate Dual Channel Memory Technology. Otherwise, it will operate at single channel mode.



1. It is not allowed to install a DDR or DDR2 memory module into DDR3 slot;otherwise, this motherboard and DIMM may be damaged.
2. If you install only one memory module or two non-identical memory modules, it is unable to activate the Dual Channel Memory Technology.
3. Some DDR3 1GB double-sided DIMMs with 16 chips may not work on this motherboard. It is not recommended to install them on this motherboard.

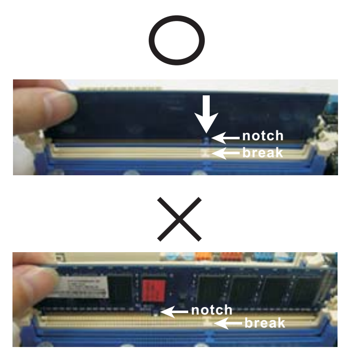
Installing a DIMM



Please make sure to disconnect power supply before adding or removing DIMMs or the system components.

Step 1. Unlock a DIMM slot by pressing the retaining clips outward.

Step 2. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.





The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

Step 3. Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated.

English

2.4 Expansion Slots (PCI Express Slots)

There are 2 PCI Express slots on this motherboard.

PCIE slots:

PCIE1 (PCIE 3.0 x16 slot; Blue) is used for PCI Express x16 lane width graphics cards.

PCIE2 (PCIE 2.0 x1 slot; White) is used for PCI Express cards with x1 lane width cards, such as Gigabit LAN card, SATA2 card, etc.



Only PCIE1 slot supports Gen 3 speed. To run the PCI Express in Gen 3 speed, please install an Ivy Bridge CPU. If you install a Sandy Bridge CPU, the PCI Express will run only at PCI Express Gen 2 speed.

Installing an expansion card

Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.

Step 2. Remove the system unit cover (if your motherboard is already installed in a chassis).

Step 3. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.

Step 4. Align the card connector with the slot and press firmly until the card is completely seated on the slot.

Step 5. Fasten the card to the chassis with screws.

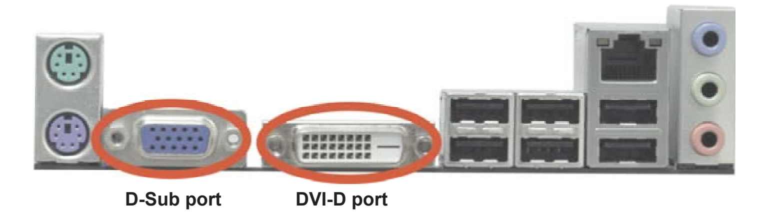
Step 6. Replace the system cover.

2.5 Dual Monitor and Surround Display Features

Dual Monitor Feature

This motherboard supports dual monitor feature. With the internal VGA output support (DVI-D and D-Sub), you can easily enjoy the benefits of dual monitor feature without installing any add-on VGA card to this motherboard. This motherboard also provides independent display controllers for DVI-D and D-Sub to support dual VGA output so that DVI-D and D-sub can drive same or different display contents.
To enable dual monitor feature, please follow the below steps:

1. Connect DVI-D monitor cable to DVI-D port on the I/O panel, and connect D-Sub monitor cable to D-Sub port on the I/O panel.



2. If you have installed onboard VGA driver from our support CD to your system already, you can freely enjoy the benefits of dual monitor function after your system boots. If you haven't installed onboard VGA driver yet, please install onboard VGA driver from our support CD to your system and restart your computer.

English

Surround Display Feature

This motherboard supports surround display upgrade. With the internal VGA output support (DVI-D and D-Sub) and external add-on PCI Express VGA cards, you can easily enjoy the benefits of surround display feature.

Please refer to the following steps to set up a surround display environment:

1. Install the PCI Express VGA card on PCIE1 slot. Please refer to page 15 for proper expansion card installation procedures for details.
2. Connect DVI-D monitor cable to DVI-D port on the I/O panel, and connect D-Sub monitor cable to D-Sub port on the I/O panel. Then connect other monitor cables to the corresponding connectors of the add-on PCI Express VGA card on PCIE1 slot.
3. Boot your system. Press <F2> or <Del> to enter UEFI setup. Enter "Onboard VGA Share Memory" option to adjust the memory capability to [32MB], [64MB], [128MB], [256MB] or [512MB] to enable the function of D-sub. Please make sure that the value you select is less than the total capability of the system memory. If you do not adjust the UEFI setup, the default value of "Onboard VGA Share Memory", [Auto], will disable D-Sub function when the add-on VGA card is inserted to this motherboard.
4. Install the onboard VGA driver and the add-on PCI Express VGA card driver to your system. If you have installed the drivers already, there is no need to install them again.
5. Set up a multi-monitor display.

For Windows® XP / XP 64-bit OS:

Right click the desktop, choose "Properties", and select the "Settings" tab so that you can adjust the parameters of the multi-monitor according to the steps below.

A. Click the "Identify" button to display a large number on each monitor.

B. Right-click the display icon in the Display Properties dialog that you wish to be your primary monitor, and then select "Primary". When you use multiple monitors with your card, one monitor will always be Primary, and all additional monitors will be designated as Secondary.

C. Select the display icon identified by the number 2.

D. Click "Extend my Windows desktop onto this monitor".

E. Right-click the display icon and select "Attached", if necessary.

F. Set the "Screen Resolution" and "Color Quality" as appropriate for the second monitor. Click "Apply" or "OK" to apply these new values.

G. Repeat steps C through E for the diaplay icon identified by the number one, two, three and four.

For Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS:

Right click the desktop, choose "Personalize", and select the "Display Settings" tab so that you can adjust the parameters of the multi-monitor according to the steps below.

A. Click the number "2" icon.

B. Click the items "This is my main monitor" and "Extend the desktop onto this monitor".

C. Click "OK" to save your change.

D. Repeat steps A through C for the display icon identified by the number three and four.

6. Use Surround Display. Click and drag the display icons to positions representing the physical setup of your monitors that you would like to use. The placement of display icons determines how you move items from one monitor to another.



HDCP Function

HDCP function is supported on this motherboard. To use HDCP function with this motherboard, you need to adopt the monitor that supports HDCP function as well. Therefore, you can enjoy the superior display quality with high-definition HDCP encryption contents. Please refer to below instruction for more details about HDCP function.

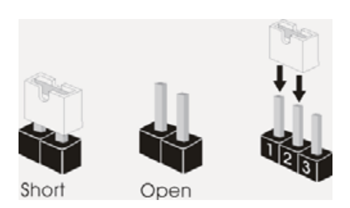
What is HDCP?

HDCP stands for High-Bandwidth Digital Content Protection, a specification developed by Intel® for protecting digital entertainment content that uses the DVI interface. HDCP is a copy protection scheme to eliminate the possibility of intercepting digital data midstream between the video source, or transmitter - such as a computer, DVD player or set-top box - and the digital display, or receiver - such as a monitor, television or projector. In other words, HDCP specification is designed to protect the integrity of content as it is being transmitted.

Products compatible with the HDCP scheme such as DVD players, satellite and cable HDTV set-top-boxes, as well as few entertainment PCs requires a secure connection to a compliant display. Due to the increase in manufacturers employing HDCP in their equipment, it is highly recommended that the HDTV or LCD monitor you purchase is compatible.

2.6 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is "Short". If no jumper cap is placed on pins, the jumper is "Open". The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when jumper cap is placed on these 2 pins.



Jumper	Setting		Description
Clear CMOS Jumper (CLRCMOS1) (see p.2, No. 21)	1_2 Default	2_3 Clear CMOS	

Note: CLRCMOS1 allows you to clear the data in CMOS. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action. Please be noted that the password, date, time, user default profile, 1394 GUID and MAC address will be cleared only if the CMOS battery is removed.

English

2.7 Onboard Headers and Connectors



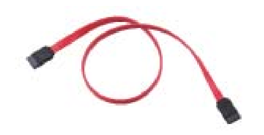
Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

Serial ATAII Connectors
(SATA2_0: see p.2, No. 10)
(SATA2_1: see p.2, No. 8)
(SATA2_2: see p.2, No. 12)
(SATA2_3: see p.2, No. 11)



These four Serial ATAII (SATAII) connectors support SATA data cables for internal storage devices. The current SATAII interface allows up to 3.0 Gb/s data transfer rate.

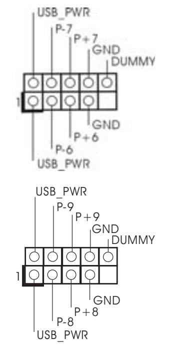
Serial ATA (SATA) Data Cable
(Optional)



Either end of the SATA data cable can be connected to the SATA / SATAII hard disk or the SATAII connector on this motherboard.

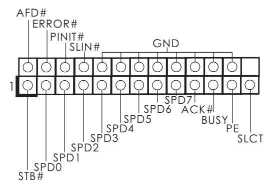
USB 2.0 Headers
(9-pin USB6_7)
(see p.2 No. 15)

(9-pin USB8_9)
(see p.2 No. 16)



Besides six default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

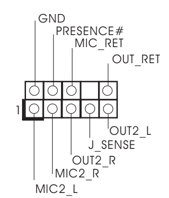
Print Port Header
(25-pin LPT1)
(see p.2 No. 18)



This is an interface for print port cable that allows convenient connection of printer devices.

English

Front Panel Audio Header
(9-pin HD_AUDIO1)
(see p.2 No. 19)

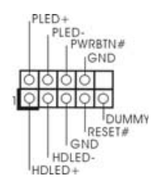


This is an interface for front panel audio cable that allows convenient connection and control of audio devices.



1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
   A. Connect Mic_IN (MIC) to MIC2_L.
   B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
   C. Connect Ground (GND) to Ground (GND).
   D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
   E. To activate the front mic.
      For Windows® XP / XP 64-bit OS:
      Select "Mixer". Select "Recorder". Then click "FrontMic".
      For Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS:
      Go to the "FrontMic" Tab in the Realtek Control panel. Adjust "Recording Volume".

System Panel Header
(9-pin PANEL1)
(see p.2 No. 14)



This header accommodates several system front panel functions.



Connect the power switch, reset switch and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

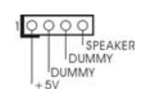
PWRBTN (Power Switch):
Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.
RESET (Reset Switch):
Connect to the reset switch on the chassis front panel. Press the reset switch to restart the computer if the computer freezes and fails to perform a normal restart.
PLED (System Power LED):
Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1 sleep state. The LED is off when the system is in S3/S4 sleep state or powered off (S5).

English

HDLED (Hard Drive Activity LED):
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assign-ments are matched correctly.

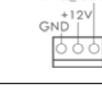
Chassis Speaker Header
(4-pin SPEAKER 1)
(see p.2 No. 13)



Please connect the chassis speaker to this header.

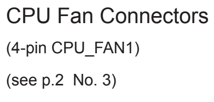
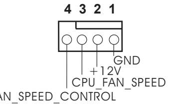
Chassis and Power Fan Connectors
(4-pin CHA_FAN1)
(see p.2 No. 9)

(3-pin PWR_FAN1)
(see p.2 No. 23)



Please connect the fan cables to the fan connectors and match the black wire to the ground pin.

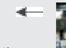
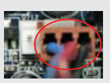
CPU Fan Connectors
(4-pin CPU_FAN1)
(see p.2 No. 3)

Please connect the CPU fan cable to the connector and match the black wire to the ground pin.

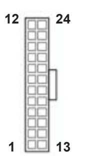


Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

Pin 1-3 Connected  

3-Pin Fan Installation

ATX Power Connector
(24-pin ATXPWR1)
(see p.2 No. 4)

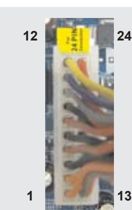


Please connect an ATX power supply to this connector.

English



Though this motherboard provides 24-pin ATX power connector, it can still work if you adopt a traditional 20-pin ATX power supply. To use the 20-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 13.

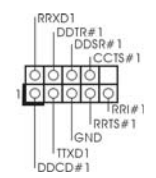


20-Pin ATX Power Supply Installation

ATX 12V Power Connector
(4-pin ATX12V1)
(see p.2 No. 2)

Please connect an ATX 12V power supply to this connector.

Serial port Header
(9-pin COM1)
(see p.2 No. 17)



This COM1 header supports a serial port module.

English

2.8 Driver Installation Guide

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.

2.9 Installing Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit Without RAID Functions

If you want to install Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit OS on your SATA / SATAII HDDs without RAID functions, please follow below procedures according to the OS you install.

2.9.1 Installing Windows® XP / XP 64-bit Without RAID Functions

If you want to install Windows® XP / XP 64-bit OS on your SATA / SATAII HDDs without RAID functions, please follow below steps.

Using SATA / SATAII HDDs without NCQ function

STEP 1: Set up UEFI.

A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.

B. Set the option "SATA Mode Selection" to [IDE].

STEP 2: Install Windows® XP / XP 64-bit OS on your system.

2.9.2 Installing Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS on your SATA / SATAII HDDs without RAID functions, please follow below steps.

Using SATA / SATAII HDDs without NCQ function

STEP 1: Set up UEFI.

A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.

B. Set the option "SATA Mode Selection" to [IDE].

STEP 2: Install Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS on your system.

Using SATA / SATAII HDDs with NCQ function

STEP 1: Set Up UEFI.

A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.

B. Set the option “SATA Mode Selection” to [AHCI].

STEP 2: Install Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS on your system.

3. BIOS Information

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> or <Del> during the Power-On-Self-Test (POST) to enter BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the predetermined choices. For the detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

4. Software Support CD information

This motherboard supports various Microsoft® Windows® operating systems: 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if “AUTORUN” is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click on the file “ASSETUP.EXE” from the BIN folder in the Support CD to display the menus.

1. 主板简介

谢谢你采用了华擎 ***H71M-DG3*** 主板，本主板由华擎严格制造，质量可靠，稳定性好，能够获得卓越的性能。本安装指南介绍了安装主板的步骤。更加详细的主板信息可参看驱动光盘的用户手册。



由于主板规格和 BIOS 软件将不断升级，本手册之相关内容变更恕不另行通知。请留意华擎网站上公布的升级版本。你也可以在华擎网站找到最新的显卡和 CPU 支持表。
华擎网址：http://www.asrock.com
如果您需要与此主板有关的技术支持，请参观我们的网站以了解您使用机种的规格信息。
www.asrock.com/support/index.asp

1.1 包装盒内物品

华擎 ***H71M-DG3*** 主板
　(Micro ATX 规格 : 8.9 英寸 X 6.8 英寸，22.6 厘米 X 17.3 厘米)
华擎 ***H71M-DG3*** 快速安装指南
华擎 ***H71M-DG3*** 支持光盘
两条 Serial ATA(SATA) 数据线 (选配)
一块 I/O 挡板



ASRock提醒您...
为了在 Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit 系统中取得更好的性能，建议您在BIOS中将Storage Configuration（存储配置）选项设成AHCI模式。关于BIOS设置程序，请参见支持光盘中的“User Manual”以了解相关详细信息。

简体中文

1.2 主板规格

架构	- Micro ATX 规格： 8.9 英寸 X 6.8 英寸，22.6 厘米 X 17.3 厘米 - 全固态电容设计
处理器	- 支持第三代和二代 Intel® Core™ i7 / i5 / i3 处理器 (LGA1155 针脚) - 支持 Intel® Turbo Boost 2.0 技术 - 支持 K- 系列解锁的 CPU - 支持 Hyper-Threading 超线程技术（详见警告 1）
芯片组	- Intel® H61 - 支持 Intel® 快速启动技术和 Intel® 智能连接技术
系统内存	- 支持双通道 DDR3 内存技术（见警告 2） - 配备 2 个 DDR3 DIMM 插槽 - 支持 DDR3 1600/1333/1066 non-ECC、un-buffered 内存 (Intel® Ivy Bridge CPU 支持 DDR3 1600，Intel® Sandy Bridge CPU 支持 DDR3 1333) - 最高支持 16GB 系统容量（见警告 3） - 通过 Intel® Ivy Bridge CPU 支持 Intel® Extreme Memory Profile(XMP)1.3/1.2
扩展插槽	- 1 x PCI Express 3.0 x16 插槽 (蓝色 @ x16 模式) * 使用 Intel® Ivy Bridge CPU 方可支持 PCIE 3.0。若使用 Intel® Sandy Bridge CPU，仅支持 PCIE 2.0。 - 1 x PCI Express x1 插槽
板载显卡	* 仅内置 GPU 的处理器可支持 Intel® HD Graphics 内置视觉特性与 VGA 输出。 - 通过 Intel® Ivy Bridge CPU 支持 Intel® HD Graphics 内置视觉特性：Intel® Quick Sync Video 2.0、Intel® InTru™ 3D、Intel® Clear Video HD 技术、Intel® Insider™、Intel® HD Graphics 2500/4000 - 通过 Intel® Sandy Bridge CPU 支持 Intel® HD Graphics 内置视觉特性：Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® Clear Video HD 技术、Intel® HD Graphics 2000/3000、Intel® Advanced Vector Extensions(AVX) - Intel® Ivy Bridge CPU 支持 Pixel Shader 5.0、DirectX 11 技术。Intel® Sandy Bridge CPU 支持 Pixel Shader 4.1、DirectX 10.1 技术。 - 通过 Intel® Ivy Bridge CPU 支持最大共享内存 1760MB。通过 Intel® Sandy Bridge CPU 支持最大共享内存 1759MB。(见警告 4) - 双 VGA 输出：通过独立显示控制器提供 DVI-D 和 D-Sub 接口

简体中文

	- 支持 DVI，最高分辨率达 1920x1200 @ 60Hz - 支持 D-Sub，最高分辨率达 2048x1536 @ 75Hz - 通过 DVI 接口支持 HDCP 功能 - 通过 DVI 接口可播放 10800 线蓝光光盘 (BD) / HD-DVD 光盘
音效	- 5.1 声道高保真音频 (Realtek ALC662 音频编解码器)
板载 LAN 功能	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111C - 支持网路唤醒 (Wake-On-LAN) - 支持 PXE
Rear Panel I/O (后面板输入 / 输出接口)	I/O 界面 - 1 个 PS/2 鼠标接口 - 1 个 PS/2 键盘接口 - 1 个 D-Sub 接口 - 1 个 DVI-D 接口 - 6 个可直接使用的 USB 2.0 接口 - 1 个 RJ-45 局域网接口与 LED 指示灯 (ACT/LINK LED 和 SPEED LED) - 高保真音频插孔：音频输入 / 前置喇叭 / 麦克风
连接头	- 4 x SATA2 3.0Gb/s 连接头，支持 NCQ, AHCI 和热插拔功能 - 1 x 打印机端口接针 - 1 x 串行接口 - CPU/ 机箱 / 电源风扇接头 - 24 针 ATX 电源接头 - 4 针 12V 电源接头 - 前置音频面板接头 - 2 x USB 2.0 接口 (可支持 4 个额外的 USB 2.0 接口)
BIOS	- 32Mb AMI BIOS - AMI UEFI Legal BIOS, 支持 GUI - 支持即插即用 (Plug and Play,PnP) - ACPI 1.1 电源管理 - 支持唤醒功能 - 支持 jumperfree 免跳线模式 - IGPU、DRAM、PCH、CPU PLL、VTT、VCCSA 电压多功能调节器
支持光盘	- 驱动程序，工具软件，杀毒软件 (测试版本),CyberLink MediaEspresso 6.5 试用版，Creative Sound Blaster X-Fi MB - 试用版，华擎 MAGIX 多媒体套件 - OEM
独家功能	- ASRock Extreme Tuning Utility (AXTU) (详见警告 5) - 华擎即时开机功能 - 华擎 Instant Flash (见警告 6) - 华擎 APP Charger (见警告 7)

简体中文

	- 华擎 SmartView（见警告 8） - 华擎 XFast USB（见警告 9） - 华擎 XFast LAN（见警告 10） - 华擎 XFast RAM（见警告 11） - Hybrid Booster（安心超频技术）: - ASRock U-COP（见警告 12） - Boot Failure Guard（B.F.G.，启动失败恢复技术） - 组合散热器选项（C.C.O.）（见警告 13）
硬件监控器	- CPU 温度侦测 - 主板温度侦测 - CPU/ 机箱 / 电源风扇转速计 - CPU/ 机箱静音风扇（允许根据 CPU 温度自动调整机箱风扇速度） - CPU/ 机箱风扇多速控制 - 电压范围：+12V，+5V，+3.3V，核心电压
操作系统	- Microsoft® Windows® 7/7 64 位元 /Vista™/Vista™ 64 位元 / XP/XP 64 位元适用于此主板（见警告 14）
认证	- FCC，CE，WHQL - 支持 ErP/EuP（需要同时使用支持 ErP/EuP 的电源供应器）（见警告 15）

* 请参阅华擎网站了解详细的产品信息：http://www.asrock.com

警告

请了解超频具有不可避免的风险，这些超频包括调节 BIOS 设置、运用异步超频技术或使用第三方超频工具。超频可能会影响您的系统稳定性，甚至会导致系统组件和设备的损坏。这种风险和代价须由您自己承担，我们对超频可能导致的损坏不承担责任。

简体中文

警告！

1、 关于“Hyper-Threading Technology”（超线程技术）的设置，请参考 CD 光盘中的“User Manual”（用户手册，中文版）第 32 页。
2、 这款主板支援双通道内存技术。在您实现双通道内存技术之前，为能正确安装，请确认您已经阅读了第 14 页的内存模组安装指南。
3、 由于操作系统的限制，在 Windows® 7 / Vista™ / XP 下，供系统使用的实际内存容量可能小于 4GB。对於 Windows® 操作系统搭配 64 位元 CPU 来说，不会存在这样的限制。您可以通过华擎 XFast RAM 来利用 Windows® 无法使用的内存。
4、 最大共享内存大小由芯片组厂商定义并且可以更改。请查阅 Intel® 网站了解最新资讯。
5、 ASRock Extreme Tuning Utility (AXTU) 是一个多合一的工具，可在用户友好的界面中微调不同的系统功能，包括硬件监控、风扇控制、超频、OC DNA 和 IES。在 Hardware Monitor（硬件监控）中，显示系统的主要参数。在 Fan Control（风扇控制）中，显示风扇速度和温度，以便您进行调整。在 Overclocking（超频）中，您可以对 CPU 进行超频，以优化系统性能。在 OC DNA 中，您可以将自己的 OC 设置保存为配置文件，并与您的朋友共享。您的朋友可以将您的 OC 配置文件加载他们的系统中，从而得到相同的 OC 设置。在 IES（智能节能）中，电压调节器可以在 CPU 核心空闲时减少输出相位数，以提高效率且不影响运计算性能。关于 ASRock Extreme Tuning Utility (AXTU) 的操作步骤，请访问我们的网站。
   华擎网站：http://www.asrock.com
6、 华擎 Instant Flash 是一个内建于 Flash ROM 的 BIOS 更新工具程序。这个方便的 BIOS 更新工具可让您无需进入操作系统（如 MS-DOS 或 Windows®）即可进行 BIOS 的更新。在系统开机自检过程中按下 <F6> 键或在 BIOS 设置菜单中按下 <F2> 键即可进入华擎 Instant Flash 工具程序。启动这一程序後，只需把新的 BIOS 文件保存在 U 盘、软盘或硬盘中，轻松点击鼠标就能完成 BIOS 的更新，而不再需要准备额外的软盘或其他复杂的更新程序。请注意：U 盘或硬盘必须使用 FAT32/64 文件系统。
7、 若您想要更快速、更自由地为您的苹果设备，如 iPhone/iPad/iPod touch 充电，华擎为您提供了一个绝妙的解决方案 - 华擎 APP Charger。只需安装 APP Charger 驱动程序，用电脑为 iPhone 充电最多可比以往快 40%。华擎 APP Charger 允许您同时为多部苹果设备快速充电，甚至可以在电脑进入待机 (S1)、挂起至内存 (S3)、休眠 (S4) 或关机 (S5) 模式下持续为设备充电。只需安装了 APP Charger 驱动程序，您立刻就能拥有非凡的充电体验。
8、 SmartView 是 Internet 浏览器的一项新功能，它作为 IE 的智能起始页面，在一个增强的视图中提供您经常访问的网站、您的游览历史记录、您的 Facebook 朋友、以及您的实时新闻来源，可为您提供更具个性化的 Internet 体验。华擎主板专门配备 SmartView 应实用程序，可帮助您随时与朋友保持联系。为使用 SmartView 功能，请确保您操作系统的版本是 Windows® 7 / 7 64 位元 / Vista™ / Vista™ 64 位元，浏览器的版本是 IE8。华擎网站：http://www.asrock.com/Feature/SmartView/index.asp

9、 华擎 XFast USB 可以提升 USB 存储设备性能。性能可能因设备特性不同而存在差异。

10、华擎 XFast LAN 可提供更快的网络访问，包括以下诸多好处。网络应用程序优先级：您可以设置理想的应用程序优先级，并可以添加新程序。游戏更少延迟：将在线游戏设置为较高的优先级，可降低游戏中的延迟。流量定形：您可以在观看 Youtube 高清视频的同时进行文件下载。实时分析您的数据：通过状态窗口，您可以清楚地看到目前正在传输的是哪个数据流。

11、华擎 XFast RAM 能充分利用 Windows® 操作系统 32-bit CPU 无法使用的内存空间。华擎 XFast RAM 可缩短之前访问过的网站的加载时间，从而加快网络冲浪速度。此外，它还能提升 Adobe Photoshop 运行的速度高达五倍之多。华擎 XFast RAM 的另一项优势是它能减少访问 SSD 或 HDD 的频次，从而延长它们的使用寿命。

12、当检测到 CPU 过热问题时，系统会自动关机。在您重新启动系统之前，请检查主板上的 CPU 风扇是否正常运转并拔出电源线，然后再将它插回。为了提高散热性，在安装 PC 系统时请在 CPU 和散热器之间涂一层导热胶。

13、组合散热器选项（C.C.O.）提供灵活的选项，让您可使用三种不同的 CPU 散热器类型，分别是 LGA775,LGA1155 与 LGA1156。请注意：并非所有的 775 和 1156 CPU 风扇都支持此功能。

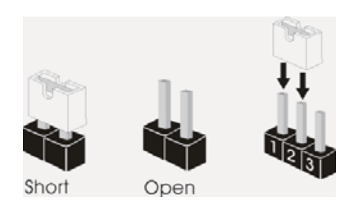
14、Microsoft® Windows® XP / XP 64-bit 系统不支持华擎 XFast RAM。

15、EuP，全称 Energy Using Product（能耗产品），是欧盟用来定义完整系统耗电量的规定。根据 EuP 的规定，一个完整系统在关机模式下的交流电总消耗必须在 1.00W 以下。为满足 EuP 标准，您需要同时具备支持 EuP 的主板和支持 EuP 的电源供应器。根据 Intel® 的建议，支持 EuP 的电源供应器必须满足在 100mA 电流消耗时，5Vsb 电源效率高于 50%。有关支持 EuP 的电源供应器选择方面的更多细节，我们建议您咨询电源供应器的制作商。

简体中文

1.3 跳线设置

插图所示的就是设置跳线的方法。当跳线帽放置在针脚上时，这个跳线就是“短接”。如果针脚上没有放置跳线帽， 这个跳线就是“开路”。插图显示了一个3针脚的跳线，当跳线帽放置在针脚1和针脚2之间时就是“短接”。



接脚	设定	
清除 CMOS (CLRCMOS1，3针脚跳线) (见第2页第21项)	 默认设置	 清除 CMOS

注意: CLRCMOS1允许您清除CMOS中的数据。如要清除并将系统参数恢复至默认设置，请关闭计算机，然后从电源插座上拔掉电源线。等待15秒后，使用跳线帽将CLRCMOS1上的插针2和插针3短接5秒。但是，请勿在更新BIOS后立即清除CMOS。如果需要在更新BIOS后立即清除CMOS，必须在执行CMOS清除操作之前，先启动然后关闭系统。请注意，只有取出CMOS电池，密码、日期、时间、用户默认配置文件、1394 GUID和MAC地址才会被清除。

简体中文

1.4 板载接头和接口



板载接头和接口不是跳线。切勿将跳线帽放置在这些接头和接口上。将跳线帽放置在接头和接口上将会导致主板的永久性损坏！

Serial ATAII 接口
(SATA2_0：见第 2 页第 10 项)
(SATA2_1：见第 2 页第 8 项)
(SATA2_2：见第 2 页第 12 项)
(SATA2_3：见第 2 页第 11 项)



这里有四组 Serial ATAII (SATAII) 接口支持 Serial (SATA) 数据线作为内部储存设置。目前 SATAII 界面理论上可提供高达 3.0Gb/s 的数据传输速率。

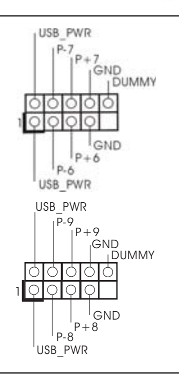
Serial ATA (SATA) 数据线
(选配)



SATA 数据线的任意一端均可连接 SATA/SATAII 硬盘或者主板上的 SATAII 接口。

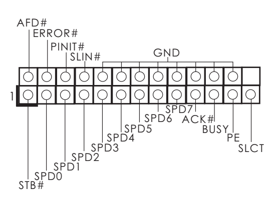
USB 2.0 扩展接头
(9 针 USB6_7)
(见第 2 页第 15 项)

(9 针 USB8_9)
(见第 2 页第 16 项)



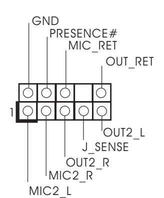
除了位於 I/O 面板的六个默认 USB 2.0 接口之外，这款主板有两组 USB 2.0 接针。这组 USB 2.0 接针可以支持两个 USB 2.0 接口。

打印机端口接针
(25 针 LPT1)
(见第 2 页第 18 项)



这是一个连接打印机端口的接口，方便您连接打印机设备。

前置音频面板接头
(9 针 HD_AUDIO1)
(见第 2 页第 19 项)



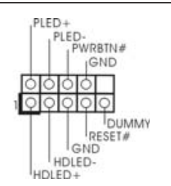
可以方便连接音频设备。

简体中文



1. 高保真音频(High Definition Audio, HDA)支持智能音频接口检测功能(Jack Sensing),但是机箱面板的连线必须支持 HDA 才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用 AC’97 音频面板，请按照下面的步骤将它安装到前面板音频接针：
   A. 将 Mic_IN(MIC) 连接到 MIC2_L。
   B. 将 Audio_R(RIN) 连接到 OUT2_R，将 Audio_L(LIN) 连接到 OUT2_L。
   C. 将 Ground(GND) 连接到 Ground(GND)。
   D. MIC_RET 和 OUT_RET 仅用于 HD 音频面板。您不必将它们连接到 AC’97 音频面板。
   E. 开启前置麦克风。
      在 Windows® XP / XP 64 位元操作系统中：
      选择”Mixer”。选择”Recorder”　　。接著点击”FrontMic”。
      在 Windows® 7 / 7 64 位元 / Vista™ / Vista™ 64 位元操作系统中：
      在 Realtek 控制面板中点击”FrontMic”。调节”Recording Volume”。

系统面板接头
(9 针 PANEL1)
(见第 2 页第 14 项)



这个接头提供数个系统前面板功能。

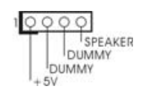


根据下面的针脚说明连接机箱上的电源开关、重启按钮与系统状态指示灯到这个排针。根据之前请注意针脚的正负极。

PWRBTN(电源开关):
连接机箱前面板的电源开关。您可以设置用电源键关闭系统的方式。
RESET(重启开关):
连接机箱前面板的重启开关。当电脑死机且无法正常重新启动时，可按下重启开关重新启动电脑。
PLED(系统电源指示灯):
连接机箱前面板的电源状态指示灯。当系统运行时，此指示灯亮起。当系统处于 S1 待机模式时，此指示灯保持闪烁。当系统处于 S3/S4 待机模式或关机 (S5) 模式时，此指示灯熄灭。
HD LED(硬盘活动指示灯):
连接机箱前面板的硬盘动作指示灯。当硬盘正在读取或写入数据时，此指示灯亮起。

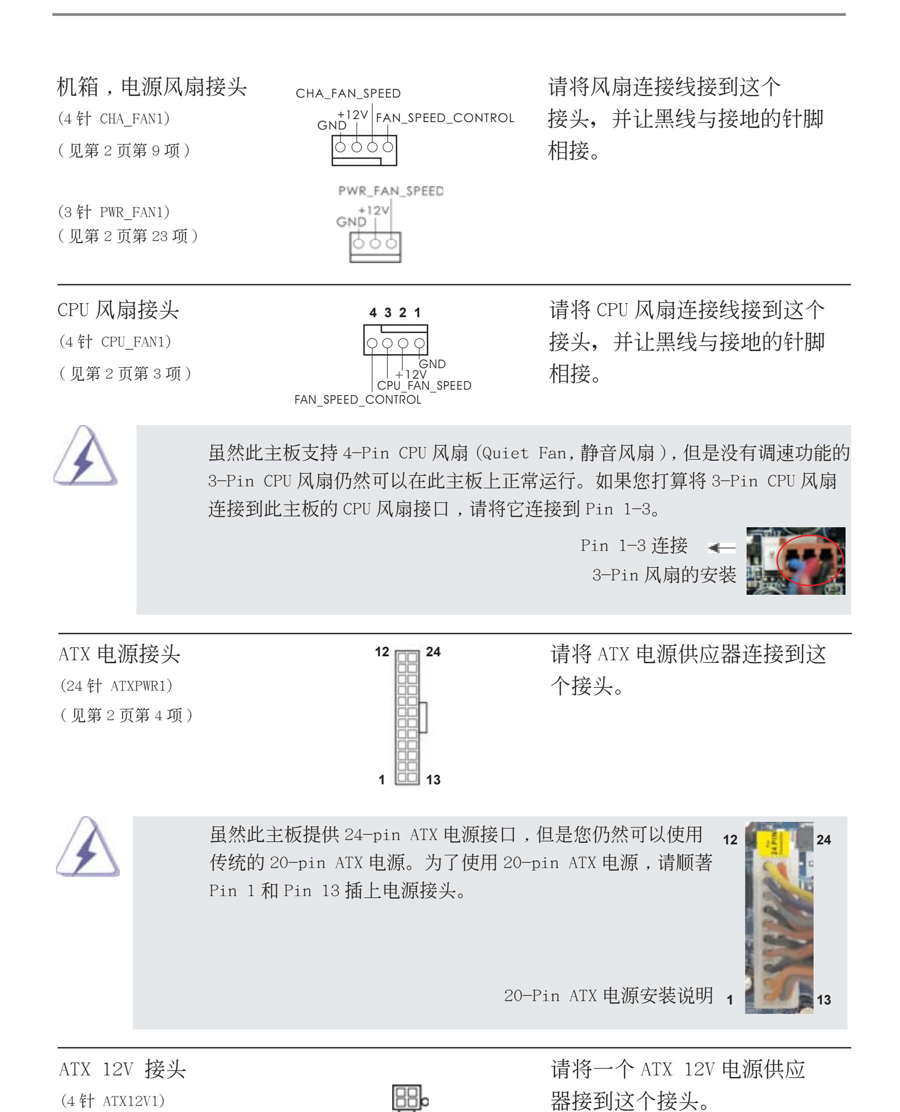
前面板设计因机箱不同而有差异。前面板模块一般由电源开关、重启开关、电源指示灯、硬盘动作指示灯、喇叭等构成。将您的机箱前面板连接到此排针时，请确认连接线与针脚上的说明相对应。

机箱喇叭接头
(4 针 SPEAKER1)
(见第 2 页第 13 项)



请将机箱喇叭连接到这个接头。

简体中文



机箱，电源风扇接头
(4 针 CHA_FAN1)
(见第 2 页第 9 项)

(3 针 PWR_FAN1)
(见第 2 页第 23 项)

请将风扇连接线接到这个接头，并让黑线与接地的针脚相接。

CPU 风扇接头
(4 针 CPU_FAN1)
(见第 2 页第 3 项)

请将 CPU 风扇连接线接到这个接头，并让黑线与接地的针脚相接。

虽然此主板支持 4-Pin CPU 风扇 (Quiet Fan，静音风扇)，但是没有调速功能的 3-Pin CPU 风扇仍然可以在此主板上正常运行。如果您打算将 3-Pin CPU 风扇连接到此主板的 CPU 风扇接口，请将它连接到 Pin 1-3。

Pin 1-3 连接

3-Pin 风扇的安装

ATX 电源接头
(24 针 ATXPWR1)
(见第 2 页第 4 项)

请将 ATX 电源供应器连接到这个接头。

虽然此主板提供 24-pin ATX 电源接口，但是您仍然可以使用传统的 20-pin ATX 电源。为了使用 20-pin ATX 电源，请顺著 Pin 1 和 Pin 13 插上电源接头。

20-Pin ATX 电源安装说明

ATX 12V 接头
(4 针 ATX12V1)
(见第 2 页第 2 项)

请将一个 ATX 12V 电源供应器接到这个接头。

串行接口连接器
(9 针 COM1)
(见第 2 页第 17 项)

这个 COM1 端口支持一个串行接口的外设。



2. BIOS 信息

主板上的 Flash Memory 存储了 BIOS 设置程序。请再启动电脑进行开机自检（POST）时按下 <F2> 或 <Del> 键进入 BIOS 设置程序；此外，你也可以让开机自检（POST）进行常规检验。如果你需要在开机自检（POST）之后进入 BIOS 设置程序，请按下 <Ctrl>+<Alt>+<Delete> 键重新启动电脑，或者按下系统面板上的重启按钮。有关 BIOS 设置的详细信息，请查阅随机支持光盘里的用户手册（PDF 文件）。

3. 支持光盘信息

本主板支持各种微软视窗操作系统：Microsoft® Windows® 7/7 64 位元 /Vista™/ Vista™ 64 位元 /XP/XP 64 位元。主板随机支持光盘包含各种有助于提高主板效能的必要驱动和实用程序。请将随机支持光盘放入光驱里，如果电脑的“自动运行”功能已启用，屏幕将会自动显示主菜单。如果主菜单不能自动显示，请查找支持光盘内 BIN 文件夹下的“ASSETUP.EXE”，并双击它，即可调出主菜单。

简体中文

电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。



图一

有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板及电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注： 此产品所标示之环保使用年限，系指在一般正常使用状况下。

1. 主機板簡介

謝謝你採用了華擎 ***H71M-DG3*** 主機板，本主機板由華擎嚴格製造，品質可靠，穩定性好，能夠獲得卓越的性能。此快速安裝指南包括了主機板介紹和分步驟安裝指導。您可以查看支持光碟裡的使用手冊了解更詳細的資料。



由於主機板規格和 BIOS 軟體將不斷更新，本手冊之相關內容變更恕不另行通知。請留意華擎網站上公布的更新版本。你也可以在華擎網站找到最新的顯示卡和 CPU 支援列表。
華擎網址：http://www.asrock.com
如果您需要與此主機板有關的技術支援，請參觀我們的網站以了解您使用機種的規格訊息。
www.asrock.com/support/index.asp

1.1 包裝盒內物品

華擎 ***H71M-DG3*** 主機板
(Micro ATX 規格：8.9 英吋 x 6.8 英吋，22.6 公分 x 17.3 公分)
華擎 ***H71M-DG3*** 快速安裝指南
華擎 ***H71M-DG3*** 支援光碟
兩條 Serial ATA(SATA) 數據線(選配)
一塊 I/O 擋板



ASRock提醒您...
若要在Windows® 7 / 7 64位元 / Vista™ / Vista™ 64位元中發揮更好的效能，建議您將儲存裝置組態中的BIOS選項設為AHCI模式。有關BIOS設定的詳細資訊，請參閱支援光碟中的「使用者手冊」。

繁體中文

1.2 主機板規格

架構	- Micro ATX 規格： 8.9 英吋 x 6.8 英吋，22.6 公分 x 17.3 公分 - 全固態電容設計
處理器	- 支援第三代和二代 Intel® Core™ i7 / i5 / i3 處理器 (LGA1155 腳位) - 支援 Intel® Turbo Boost 2.0 技術 - 支援 K 系列解除鎖定 CPU - 支援 Hyper-Threading 技術（詳見警告 1）
晶片組	- Intel® H61 - 支援 Intel® 快速啟動技術和智能連接技術
系統記憶體	- 支援雙通道 DDR3 記憶體技術（見警告 2） - 2 個 DDR3 DIMM 插槽 - 支援 DDR3 1600/1333/1066 non-ECC、un-buffered 記憶體 (Intel® Ivy Bridge CPU 支援 DDR3 1600，Intel® Sandy Bridge CPU 支援 DDR3 1333) - 最高支援 16GB 系統容量（見警告 3） - 透過 Intel® Ivy Bridge CPU 支援 Intel® Extreme Memory Profile(XMP)1.3/1.2
擴充插槽	- 1 x PCI Express 3.0 x16 插槽（藍色 @ x16 模式） * PCIE 3.0 僅適用 Intel® Ivy Bridge CPU。Intel® Sandy Bridge CPU 僅支援 PCIE 2.0。 - 1 x PCI Express 2.0 x1 插槽
內建顯示	* 只有整合 GPU 的處理器才支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals) 與 VGA 輸出。 - 透過 Intel® Ivy Bridge CPU 支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals)：Intel® Quick Sync Video 2.0、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® Insider™、Intel® HD Graphics 2500/4000 - 透過 Intel® Sandy Bridge CPU 支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals)：Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® HD Graphics 2000/3000、Intel® Advanced Vector Extensions (AVX) - Intel® Ivy Bridge CPU 支援 Pixel Shader 5.0、DirectX 11 技術。Intel® Sandy Bridge CPU 支援 Pixel Shader 4.1、DirectX 10.1 技術。 - 透過 Intel® Ivy Bridge CPU 支援最大共享記憶體 1760MB。透過 Intel® Sandy Bridge CPU 支援最大共享記憶體 1759MB。（見警告 4）

	- 雙 VGA 輸出：透過獨立顯示控制器提供 DVI-D 和 D-Sub 接口 - 支援 DVI, 最高解析度達 1920x1200 @ 60Hz - 支援 D-Sub, 最高解析度達 2048x1536 @ 75Hz - DVI 接口支援 HDCP 功能 - DVI 接口可播放 1080p 藍光光碟（BD）/ HD-DVD 光碟
音效	- 5.1 聲道高清晰音效（Realtek ALC662 音效編解碼器）
網路功能	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111C - 支援網路喚醒（Wake-On-LAN） - 支援 PXE
Rear Panel I/O（後背板輸入 / 輸出接口）	I/O 界面 - 1 個 PS/2 滑鼠接口 - 1 個 PS/2 鍵盤接口 - 1 個 D-Sub 接口 - 1 個 DVI-D 接口 - 6 個可直接使用的 USB 2.0 接口 - 1 個 RJ-45 區域網接口與 LED 指示燈（ACT/LINK LED 和 SPEED LED） - 高清晰音效插孔：音效輸入 / 前置喇叭 / 麥克風
接頭	- 4 x SATA2 3.0Gb/s 接頭，支援 NCQ, AHCI 和熱插拔功能 - 1 x 印表機接針 - 1 x 序列埠 - CPU/ 機箱 / 電源風扇接頭 - 24 針 ATX 電源接頭 - 4 針 12V 電源接頭 - 前置音效接頭 - 2 x USB 2.0 接頭（可支援 4 個額外的 USB 2.0 接口）
BIOS	- 32Mb AMI BIOS - AMI UEFI Legal BIOS（支援 GUI） - 支援即插即用（Plug and Play,PnP） - ACPI 1.1 電源管理 - 支援喚醒功能 - 支援 jumperfree 免跳線模式 - IGPU、DRAM、PCH、CPU PLL、VTT、VCCSA 電壓多功能調節
支援光碟	- 驅動程式，工具軟體，防毒軟體（試用版本）,CyberLink MediaEspresso 6.5 試用版,Creative Sound Blaster X-Fi MB - 試用版，華擎 MAGIX 多媒體套餐 - OEM
獨家功能	- ASRock Extreme Tuning Utility (AXTU)（詳見警告 5） - 華擎即時開機功能 - 華擎 Instant Flash（見警告 6） - 華擎 APP Charger（見警告 7） - 華擎 SmartView（見警告 8）

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	- 華擎 XFast USB（見警告 9） - 華擎 XFast LAN（見警告 10） - 華擎 XFast RAM（見警告 11） - Hybrid Booster(安心超頻技術): - ASRock U-COP（見警告 12） - Boot Failure Guard (B.F.G.，啟動失敗恢復技術) - 組合散熱片選項(C.C.O.)（見警告 13）
硬體監控	- CPU 溫度偵測 - 主機板溫度偵測 - CPU/ 機箱 / 電源風扇轉速計 - CPU/ 機箱靜音風扇 (可透過 CPU 溫度自動調節機箱的風扇速度) - CPU/ 機箱風扇多速控制 - 電壓範圍：+12V, +5V, +3.3V, 核心電壓
操作系統	- Microsoft® Windows® 7/7 64 位元 /Vista™/Vista™ 64 位元 / XP/XP 64 位元（見警告 14）
認證	- FCC, CE, WHQL - 支援 ErP/EuP(需要同時使用支援 ErP/EuP 的電源供應器)（見警告 15）

* 請參閱華擎網站了解詳細的產品訊息： http://www.asrock.com

警告
請了解超頻具有不可避免的風險，這些超頻包括調節 BIOS 設置、運用非同步超頻技術或使用第三方超頻工具。超頻可能會影響您的系統穩定性，甚至會導致系統組件和設備的損壞。這種風險和代價須由您自己承擔，我們對超頻可能導致的損壞不承擔責任。

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警告！

1、 關於“Hyper-Threading Technology”的設置，請參考 CD 光碟中的“User Manual”（使用手冊，英文版）第 40 頁。
2、 這款主機板支援雙通道記憶體技術。在您使用雙通道記憶體技術之前，為能正確安裝，請確認您已經閱讀了第 14 頁的記憶體安裝指南。
3、 由於作業系統的限制，在 Windows® 7 / Vista™ / XP 下，供系統使用的實際記憶體容量可能小於 4GB。對於 Windows® 作業系統搭配 64 位元 CPU 來說，不會存在這樣的限制。對於 Windows® 作業系統搭配 64 位元 CPU 來說，不會存在這樣的限制。您可以透過華擎 XFast RAM 來利用 Windows® 無法使用的記憶體。
4、 最大共享記憶體大小由晶片組廠商定義並且可能更改。請查閱 Intel® 網站了解最新訊息。
5、 ASRock Extreme Tuning Utility (AXTU) 是一款多合一的工具，易於操作的使用者介面便於微調不同的系統功能（例如：Hardware Monitor、Fan Control、Overclocking、OC DNA 及 IES）。Hardware Monitor 可顯示系統的主要讀數；Fan Control 可顯示並可供您調整風扇速度及溫度；Overclocking 可供您進行 CPU 超頻以獲得最佳系統效能。透過 OC DNA，您可將自己的 OC 設定另存為設定檔並與朋友分享，您的朋友可將此 OC 設定檔上傳至自己的系統中，以取得相同的 OC 設定。透過 IES (Intelligent Energy Saver)，當 CPU 處於閒置狀態時，電壓調整器能降低輸出相位數量以改善效率，並可兼顧運算效能。有關 ASRock Extreme Tuning Utility (AXTU) 的操作程序說明，請造訪 ASRock 網站。
   華擎網站：http://www.asrock.com
6、 華擎 Instant Flash 是一個內建於 Flash ROM 的 BIOS 更新工具程式。這個方便的 BIOS 更新工具可讓您無需進入操作系統（如 MS-DOS 或 Windows®）即可進行 BIOS 的更新。在系統開機自檢過程中按下 <F6> 鍵或在 BIOS 設置菜單中按下 <F2> 鍵即可進入華擎 Instant Flash 工具程式。啟動這一程式後，只需把新的 BIOS 文件保存在隨身碟、磁盤或硬碟中，輕鬆點選滑鼠就能完成 BIOS 的更新，而不再需要準備額外的磁碟片或其他複雜的更新程式。請注意：隨身碟或硬碟必須使用 FAT32/64 文件系統。
7、 若您想要更快速、更自由地為您的蘋果設備，如 iPhone/iPad/iPod touch 充電，華擎為您提供了一個絕妙的解決方案－華擎 APP Charger。只需安裝 APP Charger 驅動程式，用電腦為 iPhone 充電最多可比以往快 40%。華擎 APP Charger 讓您可以同時為多部蘋果設備快速充電，甚至可以在電腦進入待命 (S1)、待命 (S3)、休眠 (S4) 或關機 (S5) 模式下持續為設備充電。只需安裝了 APP Charger 驅動程式，您立刻就能擁有非凡的充電體驗。
8、 SmartView 是網際網路瀏覽器的新功能，也是 IE 的起始頁面，其中結合了您最常瀏覽的網站、您的記錄、Facebook 朋友和即時新聞摘要，並全數整合在一個更好的檢視中，以提供更貼近您個人使用習慣的網際網路功能。ASRock 主機板獨家配備 SmartView 公用程式，協助您隨時隨地與朋友保持聯繫。若要使用 SmartView 功能，請確定您所使用的作業系統版本為 Windows® 7 / 7 64 位元 / Vista™ / Vista™ 64 位元，而且您的瀏覽器版本是 IE8。ASRock 網站：http://www.asrock.com/Feature/SmartView/index.asp

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9、 華擎 XFast USB 可提升 USB 儲存裝置的效能（效能可能須視裝置特性而定）。

10、華擎 XFast LAN 可提供更快的互聯網連接，包含以下諸多優勢。局域網優先應用：您可以設置理想的優先應用程式，並可以添加新程式。減少遊戲延遲：在設置優先級更高的網路遊戲時，可降低遊戲中的延遲。流量定形：您可以在觀看 Youtube 高解析影片的同時還進行文件下載。及時分析您的數據：透過狀態窗口，您可以清楚地看到目前正在傳輸的是哪個數據流。

11、華擎 XFast RAM 能充分利用 Windows® 操作系統 32-bit CPU 無法使用的記憶體空間。它縮短之前訪問過的網站的讀取時間，從而加快網路瀏覽速度。此外，它還能提升 Adobe Photoshop 執行的速度高達五倍之多。華擎 XFast RAM 的另一項優勢是它能減少使用 SSD 或 HDD 的頻率，從而延長它們的使用壽命。

12、當檢測到 CPU 過熱問題時，系統會自動關機。在您重新啟動系統之前，請檢查主機板上的 CPU 風扇是否正常運轉並拔出電源線，然後再將它插回。為了提高散熱性，在安裝 PC 系統時請在 CPU 和散熱器之間塗一層散熱膏。

13、組合散熱片選項 (C.C.O.) 提供具有彈性的選項，讓您可使用三種不同的 CPU 散熱片類型，分別是 LGA775,LGA1155 與 LGA1156。請注意：並非所有的 775 和 1156 CPU 風扇都支援此功能。

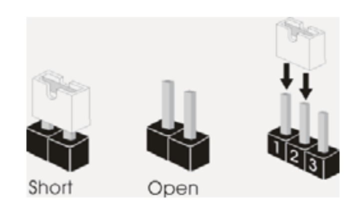
14、Microsoft® Windows® XP / XP 64-bit 系統不支援華擎 XFast RAM。

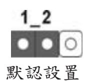
15、EuP, 全稱 Energy Using Product(能耗產品), 是歐盟用來定義完整系統耗電量的規定。根據 EuP 的規定，一個完整系統在關機模式下的交流電總消耗必須在 1.00W 以下。為符合 EuP 標準，您需要同時具備支援 EuP 的主機板和支援 EuP 的電源供應器。根據 Intel® 的建議，支援 EuP 的電源供應器必須符合在 100mA 電流消耗時，5Vsb 電源效率高於 50%。有關支援 EuP 的電源供應器選擇方面的詳情，我們建議您諮詢電源供應器的製造商。

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1.3 跳線設置

插圖所示的就是設置跳線的方法。當跳線帽放置在針腳上時，這個跳線就是“短接”。如果針腳上沒有放置跳線帽，這個跳線就是“開路”。插圖顯示了一個3針腳的跳線，當跳線帽放置在針腳1和針腳2之間時就是“短接”。



接腳	設定	
清除 CMOS (CLRCMOS1, 3針腳跳線) (見第2頁第21項)	1_2  默認設置	2_3 清除 CMOS

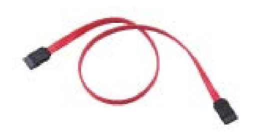
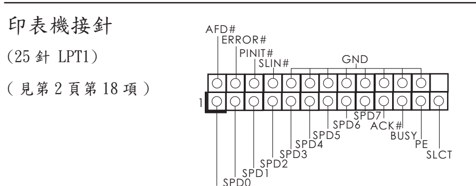
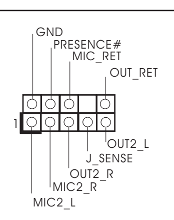
註：CLRCMOS1 可供您清除 CMOS 中的資料。若要清除及重設系統參數並恢復為預設設定，請先關閉電腦電源，並從電源插座中拔下電源線，等待15秒鐘之後，使用跳線帽使 CLRCMOS1 的 pin2 及 pin3 短路5秒的時間。但請勿於更新 BIOS 後立即清除 CMOS。如需於更新 BIOS 後立即清除 CMOS，您必須先開機再關機，然後再執行 CMOS 清除操作。請注意，只有在移除 CMOS 電池的情況下，密碼、日期、時間、使用者預設設定檔、1394 GUID 及 MAC 位址才會清除。

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1.4 接頭



此類接頭是不用跳線帽連接的，請不要用跳線帽短接這些接頭。
跳線帽不正確的放置將會導致主機板的永久性損壞！

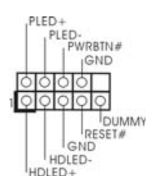
接頭	圖示	說明
Serial ATAII 接口 (SATA2_0: 見第 2 頁第 10 項) (SATA2_1: 見第 2 頁第 8 項) (SATA2_2: 見第 2 頁第 12 項) (SATA2_3: 見第 2 頁第 11 項)	SATA2_3 SATA2_1 SATA2_2 SATA2_0	這裡有四組 Serial ATAII (SATAII) 接口支援 SATA 數據線作為內部儲存設置。目前 SATAII 界面理論上可提供高達 3.0Gb/s 的數據傳輸速率。
Serial ATA (SATA) 數據線 (選配)		SATA 數據線的任意一端均可連接 SATA/SATAII 硬碟或者主機板上的 SATAII 接口。
USB 2.0 擴充接頭 (9 針 USB6_7) (見第 2 頁第 15 項)	USB_PWR P-7 P+7 GND DUMMY 1 GND P+6 P-6 USB_PWR	除了位於 I/O 面板的六個 USB 2.0 接口之外，這款主機板有兩組 USB 2.0 接針。每組 USB 2.0 接針可以支援兩個 USB 2.0 接口。
(9 針 USB8_9) (見第 2 頁第 16 項)	USB_PWR P-9 P+9 GND DUMMY 1 GND P+8 P-8 USB_PWR	
印表機接針 (25 針 LPT1) (見第 2 頁第 18 項)		這是一個連接印表機的接口，方便您連接印表機設備。
前置音效接頭 (9 針 HD_AUDIO1) (見第 2 頁第 19 項)		可以方便連接音效設備。

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1. 高清晰音效(High Definition Audio, HDA)支援智能音效接口檢測功能(Jack Sensing),但是機箱面板的連線必須支持 HDA 才能正常使用。請按我們提供的手冊和機箱手冊上的使用說明安裝您的系統。
2. 如果您使用 AC' 97 音效面板,請按照下面的步驟將它安裝到前面板音效接針:
   A. 將 Mic_IN(MIC)連接到 MIC2_L。
   B. 將 Audio_R(RIN)連接到 OUT2_R, 將 Audio_L(LIN)連接到 OUT2_L。
   C. 將 Ground(GND)連接到 Ground(GND)。
   D. MIC_RET 和 OUT_RET 僅用於 HD 音效面板。您不必將它們連接到 AC' 97 音效面板。
   E. 開啟前置麥克風。
   在 Windows® XP / XP 64 位元作業系統中:
   選擇"Mixer"。選擇"Recorder"。接著點選"FrontMic"。
   在 Windows® 7 / 7 64 位元 / Vista™ / Vista™ 64 位元作業系統中:
   在 Realtek 控制面板中點選"FrontMic"。調整"Recording Volume"。

系統面板接頭
(9 針 PANEL1)
(見第 2 頁第 14 項)



可接各種不同燈,電源開關及重啟鍵等各種連線。

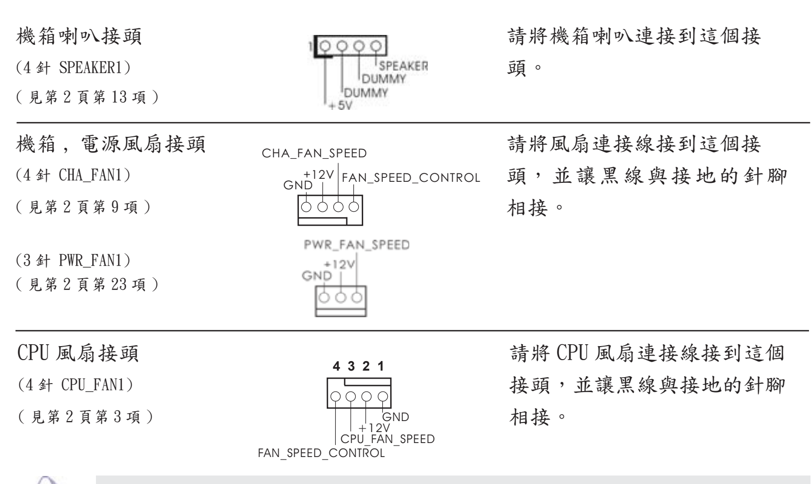


請根據下面的腳位說明連接機箱上的電源開關、重開按鈕與系統狀態指示燈到這個接頭。請先注意針腳的正負極。

PWRBTN(電源開關):
連接機箱前面板的電源開關。您可以設定用電源鍵關閉系統的方式。
RESET(重開開關):
連接機箱前面板的重開開關。當電腦當機且無法正常重新啟動時,可按下重開開關重新啟動電腦。
PLED(系統電源指示燈):
連接機箱前面板的電源狀態指示燈。當系統運行時,此指示燈亮起。當系統處於 S1 待命模式時,此指示燈保持閃爍。當系統處於 S3/S4 待命模式或關機(S5)模式時,此指示燈熄滅。
HD LED(硬碟活動指示燈):
連接機箱前面板的硬碟動作指示燈。當硬碟正在讀取或寫入數據時,此指示燈亮起。

前面板設計因機箱不同而有差異。前面板模組一般由電源開關、重開開關、電源指示燈、硬碟活動指示燈、喇叭等構成。將您的機箱前面板連接到此接頭時,請確認連接線與針腳上的說明相對應。

機箱喇叭接頭
(4 針 SPEAKER1)
(見第 2 頁第 13 項)



請將機箱喇叭連接到這個接頭。

機箱，電源風扇接頭
(4 針 CHA_FAN1)
(見第 2 頁第 9 項)

(3 針 PWR_FAN1)
(見第 2 頁第 23 項)

請將風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。

CPU 風扇接頭
(4 針 CPU_FAN1)
(見第 2 頁第 3 項)

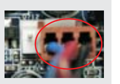
4 3 2 1
GND
+12V
CPU_FAN_SPEED
FAN_SPEED_CONTROL

請將 CPU 風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。



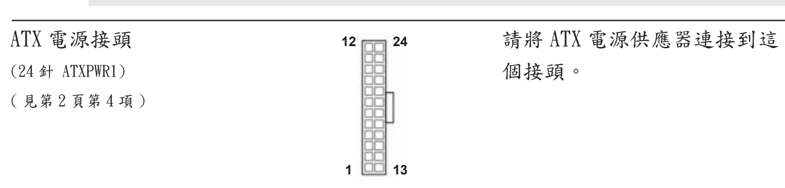
雖然此主板支持 4-Pin CPU 風扇 (Quiet Fan, 靜音風扇), 但是沒有調速功能的 3-Pin CPU 風扇仍然可以在此主板上正常運行。如果您打算將 3-Pin CPU 風扇連接到此主板的 CPU 風扇接口，請將它連接到 Pin 1-3。

Pin 1-3 連接



3-Pin 風扇的安裝

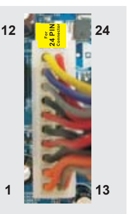
ATX 電源接頭
(24 針 ATXPWR1)
(見第 2 頁第 4 項)



請將 ATX 電源供應器連接到這個接頭。



雖然此主機板提供 24-pin ATX 電源接口，但是您仍然可以使用傳統的 20-pin ATX 電源。為了使用 20-pin ATX 電源，請順著 Pin 1 和 Pin 13 插上電源接頭。



20-Pin ATX 電源安裝說明

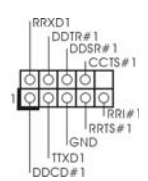
ATX 12V 電源接口
(4 針 ATX12V1)
(見第 2 頁第 2 項)



請注意，必需將帶有 ATX 12V 插頭的電源供應器連接到這個插座，這樣就可以提供充足的電力。如果不這樣做，就會導致供電故障。



序列埠
(9 針 COM1)
(見第 2 頁第 17 項)



這個序列埠 COM1 支援一個序列埠的裝置。

繁體中文

2. BIOS 訊息

主板上的Flash Memory晶片存儲了BIOS設置程序。啟動系統，在系統開機自檢(POST)的過程中按下 <F2> 或 <Del> 鍵，就可進入 BIOS 設置程序，否則將繼續進行開機自檢之常規檢驗。如果需要在開機自檢後進入 BIOS 設置程序，請按下 <Ctl> + <Alt> + <Delete> 鍵重新啟動電腦，或者按下系統面板上的重開按鈕。功能設置程序儲存有主板自身的和連接在其上的設備的缺省和設定的參數。這些訊息用於在啟動系統和系統運行需要時，測試和初始化元件。有關 BIOS 設置的詳細訊息，請查閱隨機支援光碟裡的使用手冊(PDF 文件)。

3. 支援光碟訊息

本主板支援各種微軟 Windows® 操作系統：Microsoft® Windows® 7/7 64 位元 / Vista™/Vista™ 64 位元 /XP/XP 64 位元。主板附帶的支援光碟包含各種有助於提高主板效能的必要驅動和實用程式。請將隨機支援光碟放入光碟機裡，如果系統的“自動運行”功能已啟用，銀幕將會自動顯示主菜單。如果主菜單不能自動顯示，請查閱支援光碟內 BIN 文件夾下的 ASSETUP.EXE 文件並雙點它，即可調出主菜單。

1. Giriş

ASRock'ın kesintisiz titiz kalite denetimi altında üretilen güvenilir bir anakart olan ASRock ***H71M-DG3*** anakartını satın aldığınız için teşekkür ederiz. ASRock'ın kalite ve dayanıklılık konusundaki kararlılığına uygun güçlü tasarımıyla mükemmel bir performans sunar.

Bu Hızlı Takma Kılavuzu anakarta giriş ve adım adım takma kılavuzu içerir. Anakart hakkında daha ayrıntılı bilgiyi Destek CD'sinde sunulan kullanıcı kılavuzunda bulabilirsiniz.



Anakart özellikleri ve BIOS yazılımı güncelleştirilebileceğinden bu kılavuzun içeriği önceden haber verilmeksizin değişebilir. Bu belgede değişiklik yapılması durumun-da, güncelleştirilmiş sürüm ayrıca haber verilmeksizin ASRock web sitesinde sunulur. En son VGA kartlarını ve CPU destek listelerini de ASRock web sitesinde bulabilirsiniz. ASRock web sitesi http://www.asrock.com

Bu anakartla ilgili teknik desteğe ihtiyacınız olursa, kullandığınız modele özel bilgiler için lütfen web sitemizi ziyaret edin.
www.asrock.com/support/index.asp

1.1 Paket İçindekiler

ASRock ***H71M-DG3*** Anakart
(Micro ATX Form Faktörü: 8,9-inç x 6,8-inç, 22,6 cm x 17,3 cm)
ASRock ***H71M-DG3*** Hızlı Takma Kılavuzu
ASRock ***H71M-DG3*** Destek CD'si
2 x Seri ATA (SATA) Veri Kablosu (İsteğe Bağlı)
1 x G/Ç Panel Kalkanı



ASRock Size Şunu Hatırlatır...
Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit ile daha iyi performans elde etmek için, Depolama Konfigürasyonundaki BIOS seçeneğini AHCI moduna ayarlamanız tavsiye edilir. BIOS ayarı için, ayrıntıları öğrenmek üzere lütfen destek CD'mizdeki "Kullanıcı Kılavuzu"na bakın.

Türkçe

1.2 Özellikler

Platform	- Micro ATX Form Faktörü: 8,9-inç x 6,8-inç, 22,6 cm x 17,3 cm - Tüm Katı Kapasitör tasarımı
CPU	- LGA1155 Paketi'deki 3. ve 2. Nesil Intel® Core™ i7 / i5 / i3'yi destekler - Intel® Turbo Boost 2.0 Teknolojisini destekler - K-Serisi kilidi kaldırılmış işlemciyi destekler - Hyper-Threading Teknolojisini destekler (bkz. **DİKKAT 1**)
Yonga seti	- Intel® H61 - Intel® Rapid Start Teknolojisini ve Smart Connect Teknolojisi'ni destekler
Bellek	- Çift Kanallı DDR3 Belleği Teknolojisi (bkz. **DİKKAT 2**) - 2 x DDR3 DIMM yuva - DDR3 1600/1333/1066 ECC olmayan, ara belleksiz bellek (Intel® Ivy Bridge işlemciye sahip DDR3 1600, Intel® Sandy Bridge işlemciye sahip DDR3 1333) - Sistem belleğinin maks. kapasitesi: 16 GB (bkz. **DİKKAT 3**) - Intel® Ivy Bridge İşlemci ile Intel® Extreme Bellek Profilini (XMP)1.3/1.2 destekler
Genişletme Yuvası	- 1 x PCI Express 3.0 x16 yuva (mavi @ x16 modu) * PCIE 3.0, sadece Intel® Ivy Köprü İşlemcisiyle desteklenir. Intel® Sandy Köprü İşlemciyle, sadece PCIE 2.0'ı destekler. - 1 x PCI Express 2.0 x1 yuva
Grafikler	* Intel® HD Grafik Yerleşik Görselleri ve VGA çıkışları, yalnızca GPU entegre işlemciler tarafından desteklenmektedir. - Intel® Ivy Bridge İşlemci ile Intel® HD Graphics Dahili Görselleri: Intel® Hızlı Eşitleme Videosu 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Teknolojisi, Intel® Insider™, Intel® HD Graphics 2500/4000 - Intel® Sandy Bridge İşlemci ile Intel® HD Graphics Dahili Görselleri: Intel® Hızlı Eşitleme Videosu, Intel® InTru™ 3D, Intel® Clear Video HD Teknolojisi, Intel® HD Graphics 2000/3000, Intel® Gelişmiş Vektör Uzantıları (AVX) - Pixel Shader 5.0, Intel® Ivy Bridge işlemciye sahip DirectX 11. Pixel Shader 4.1,Intel® Sandy Bridge işlemciye sahip DirectX 10.1 - Intel® Ivy Bridge İşlemci ile Maks. paylaıoəlan bellek 1760 MB. Intel® Sandy Bridge İşlemci ile Maks. paylaıoəlan bellek 1759 MB. (bkz. **DƏKKAT 4**) - Çift VGA Çıkış: desteği DVI-D ve bağımsız görüntü denetleyiciler tarafından D-Sub bağlantı noktaları

Türkçe

	- 60Hz'de 1920x1200'e kadar maks. зцzьnьrlьkle DVI'yэ destekler - 75Hz'de 2048x1536'ya kadar maks. зцzьnьrlьkle D-Sub'э destekler - DVI portlarэyla HDCP iюlevini destekler - DVI portlarэyla Tam HD 1080p Blu-ray (BD) / HD-DVD oynatэmэnэ destekler
Ses	- (Realtek ALC662 Ses Codec'i) 5,1 Kanal HD Ses
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/sn - Realtek RTL8111C - LAN'da Uyan özelliğini destekler - PXE'yi destekler
Arka Panel G/3	G/3 Paneli - 1 x PS/2 Fare Portu - 1 x PS/2 Klavye Portu - 1 x D-Sub Portu - 1 x DVI-D Portu - 6 x Kullanэma Hazэr USB 2.0 Portu - 1 x RJ-45 LAN Portu, LED'li (AKT/LЭNK LED'i ve HIZ LED'i) - HD Ses Jakı: Hat Girişi/Ön Hoparlör/Mikrofon
Konektör	- 4 x SATA2 3,0Gb/sn, donanım NCQ, AHCI ve "Sistem Açıkken Bileşen Takma" işlevlerini - 1 x Yazdэrma Portu fiюi - 1 x COM portu fişi - CPU/Kasa/Güç FAN konektörü - 24 pin ATX güç konektörü - 4 pin 12V güç konektörü - Ön panel ses konektörü - 2 x USB 2.0 fiş (4 USB 2.0 portu destekler)
BIOS Özelliği	- 32 Mb AMI BIOS - GUI destekli AMI UEFI Geçerli BIOS - "Tak Çalıştır"ı destekler - ACPI 1.1 Uyumlu Uyandırma Olayları - Jumpersız ayarlamayı destekler - AMBIOS 2.3.1 Desteği - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltaj Çoklu ayarı
Destek CD'si	- Sürücüler, Yardımcı Programlar, AntiVirüs Yazılımı (Deneme Sürümü), CyberLink MediaEspresso 6.5 Deneme Sürümü, Creative Sound Blaster X-Fi MB - Deneme, ASRock MAGIX Multimedya Seti - OEM
Benzersiz Özellik	- ASRock Extreme Tuning Utility (AXTU) (bkz. **DİKKAT 5**) - ASRock Anında Önyükleme

	- ASRock Anında Flash (bkz. **DİKKAT 6**) - ASRock APP Charger (bkz. **DİKKAT 7**) - ASRock SmartView (bkz. **DİKKAT 8**) - ASRock XFast USB (bkz. **DİKKAT 9**) - ASRock XFast LAN (bkz. **DİKKAT 10**) - ASRock XFast RAM (bkz. **DİKKAT 11**) - Hibrit Yükseltici: - ASRock U-COP (bkz. **DİKKAT 12**) - Önyükleme Hatası Koruması (B.F.G.) - Kombo Soğutucu Seçeneği (C.C.O.) (bkz. **DİKKAT 13**)
Donanım Monitör	- CPU Sıcaklık Duyarlılığı - Kasa Sıcaklık Duyarlılığı - CPU/Kasa/Güç Fan Takometresi - İşlemci/Kasa Sessiz Fanı (Kasa Fan Hızı'nın İşlemci sıcaklığı ile Otomatik Ayar'ına izin verir) - CPU/Kasa Fan Çoklu-Hız Kontrolü - Voltaj İzleme: +12V, +5V, +3,3V, CPU Vcore
İS	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit uyumlu (bkz. **DİKKAT 14**)
Sertifikalar	- FCC, CE, WHQL - ErP/EuP Hazır (ErP/EuP hazır güç kaynağı gerekli) (bkz. **DİKKAT 15**)

* Ayrıntılı ürün bilgileri için lütfen web sitemizi ziyaret edin: http://www.asrock.com

UYARI

Lütfen, ayarı BIOS'da ayarlama, Untied Overclocking Teknolojisi'ni uygulama veya üçüncü taraf aşırı hızlandırma araçlarını kullanma gibi durumlarda aşırı hızlandırmayla ilgili risk olduğunu unutmayın. Aşırı hızlandırma sisteminizin kararlılığını etkiler veya hatta sisteminizin bileşenlerini ve cihazlarına zarar verebilir. Bu risk size aittir ve zararı siz ödersiniz. Aşırı hızlandırmadan kaynaklanan olası zarardan sorumlu değiliz.

DİKKAT!

1. "Hyper Threading Teknolojisi" ayarı hakkında lütfen destek CD'sindeki "Kullanıcı Kılavuzu"nda sayfa 40'ye bakın.
2. Bu anakart Çift Kanallı Bellek Teknolojisi'ni destekler. Çift Kanallı Bellek Teknolojisi'ni uygulamadan önce, uygun yükleme hakkında sayfa 14'teki bellek modüllerinin yükleme kılavuzunu okuduğunuzdan emin olun.
3. İşletim sistemi kısıtlaması nedeniyle, Windows® 7 / Vista™ / XP altında sistem kullanımı için ayırmak için gerçek bellek boyutu 4 GB'den az olabilir. 64-bit CPU'lu Windows® OS için bu tür bir sınırlama yoktur. Windows®'un kullanamadığı bellekten yararlanmak için ASRock XFast RAM'i kullanabilirsiniz.

4. Maksimum paylaıoəlan bellek boyutu yonga seti satəcəsə tarafəndan tanəmlanər ve depiıoebilir. Lьtfen en son bilgileri ıəin Intel® web sitesini kontrol edin.
5. ASRock Extreme Tuning Utility (AXTU) hepsi bir arada bir araç olup kullanıcı ile dost bir arayüzde farklı sistem işlevlerinin ince ayarını yapmak için kullanılmakta olup buna Donanım Monitörü, Fan Kontrolü, Hız Aşırtma, OC DNA ve IES dahildir. Donanım Monitöründe sisteminizde okunan önemli değerleri gösterir. Fan Kontrolünde ayarlamanız için fan hızını ve sıcaklığını gösterir. Hız aşırtmada optimum sistem performansı almak için CPU frekansını hız aşırtma yapmanıza izin verilmiştir. OC DNA'da OC ayarlarınızı bir profil olarak kaydedebilir ve arkadaşlarınız ile paylaşabilirsiniz. Ardından arkadaşlarınız OC profilini kendi sistemine ekleyerek aynı OC ayarlarını alabilir. IES'de (Akıllı Enerji Tasarrufu), CPU çekirdekleri boşta olduğunda bilgisayarın performansından ödün vermeden gerilim düzenleyicisi çıkış fazlarının sayısını düşürerek verimliliği iyileştirir. ASRock Extreme Tuning Utility (AXTU)'nun çalışma prosedürleri için lütfen web sitemizi ziyaret ediniz. ASRock web sitesi: http://www.asrock.com
6. ASRock Anında Flash, Flash ROM'a katıştırılmış bir BIOS flash yardımcı programıdır. Bu kullanışlı BIOS güncelleme aracı, sistem BIOS'unu MS-DOS veya Windows® gibi ilk önce işletim sistemine girmeden güncellemenizi sağlar. Bu yardımcı programla, POST sırasında <F6> tuşuna basabilirsiniz veya BIOS ayarları menüsünün ASRock Anında Flash'a erişmesi için <F2> tuşuna basabilirsiniz. Bu aracı başlatın ve yeni BIOS dosyasını USB flash sürücünüze, diskete veya sabit sürücüye kaydedin, sonra BIOS'unuzu yalnızca birkaç tıklatma ile ek bir disket veya diğer karmaşık flash yardımcı programlarını hazırlamadan güncelleyebilirsiniz. Lütfen USB flash sürücünün veya sabit diskin FAT32/16/12 dosya sistemi kullanması gerektiğini unutmayın.
7. iPhone/iPod/iPad Touch gibi Apple cihazlarınızı şarj etmek için daha hızlı ve daha özgür bir biçimde şarj etmek istiyorsanız, ASRock sizin için mükemmel bir çözüm hazırladı - ASRock APP Charger. Sadece APP Charger sürücünü kurarak, iPhone'unuzu bilgisayarınızdan daha çabuk ve eskisinden 40% daha hızlı şekilde şarj edebilirsiniz. ASRock APP Charger birçok Apple cihazını aynı anda ve hızlı bir biçimde şarj etmenize olanak tanır ve hatta bilgisayarınız Bekleme modunda (S1), RAM'de Askıya Al modunda (S3), uyku modunda (S4) veya kapalı(S5) iken sürekli şarj etmeyi destekler. APP Charger sürücüsü kurulu iken kolaylıkla şimdiye hiç olmadığı kadar harika bir şarj deneyimi yaşayabilirsiniz.
   ASRock internet sitesi: http://www.asrock.com/Feature/AppCharger/index.asp
8. İnternet tarayıcısının yeni bir işlevi olan SmartView, en sık ziyaret ettiğiniz web sitelerini, geçmişinizi, Facebook arkadaşlarınızı ve sizin gerçek zamanlı haber beslemelerinizi, daha kişisel bir İnternet deneyimi için geliştirilmiş bir görünümde birleştiren IE için akıllı başlangıç sayfasıdır. ASRock anakartları, hareket halindeki arkadaşlarınızla irtibat halinde kalmanıza yardım eden SmartView yardımcı programı ile donatılmıştır.

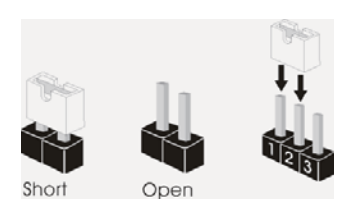
Türkçe

SmartView özelliğini kullanmak için işletim sistemi sürümünüzün Windows® 7 / 7 64 bit / VistaTM / VistaTM 64 bit, ve tarayıcı sürümünüzün IE8 olmasına dikkat edin. ASRock web sitesi: http://www.asrock.com/Feature/SmartView/index.asp

9. ASRock XFast USB, USB bellek aygıtı performansını arttırabilir. Performans aygtının özelliğine göre değişiklik gösterebilir.
10. ASRock XFast LAN hızlı internet erişimi sağlarken aşağıdaki avantajlara da sahiptir. LAN uygulaması Önceliklendirmesi: Uygulama önceliğinizi ideal şekilde yapılandırabilir ve/veya yeni programlar ekleyebilirsiniz. Oyunda Daha Az Gecikme Zamanı: Çevrimiçi oyun önceliğini daha yükseğe ayarladığınızda, oyundaki gecikmeler azalabilir. Trafik Şekillendirme: Youtube HD video izleyebilir ve aynı anda dosyaları indirebilirsiniz. Verilerinizin Gerçek Zamanlı Analizi: Durum penceresi ile, şu anda aktardığınız hangi verilerin akışının yapıldığını kolaylıkla yapılandırabilirsiniz.
11. Windows® 32-bit işletim sistemi CPU'su altında kullanılamayan bellek alanından tamamen yararlanır. ASRock XFast RAM webde sörfü şimdiye kadar olmadığı kadar hızlandırırken önceden ziyaret edilen web sitelerinin yüklenme süresini kısaltır. Ayrıca Adobe Photoshop'ın hızını 5 kat arttırır. ASRock XFast RAM'in başka bir avantajı da, SSD veya HDD'lerinize erişim sıklığını azaltarak kullanım ömürlerini uzatması.
12. CPU aşırı ısınması algılandığında, sistem otomatik olarak kapatılır. Sistemi devam ettirmeden önce, lütfen anakarttaki CPU fanının düzgün çalıştığını kontrol edin ve güç kablosunu çıkarın, sonra geri takın. Isı geçişini artırmak için, PC sistemini yüklediğinizde CPU ile ısı emici arasına ısı macunu sürmeyi unutmayın.
13. Kombo Soğutucu Seçeneği (C.C.O.) üç farklı CPU soğutucu tipi olan Soket LGA 775, LGA 1155 ve LGA 1156'yı çalıştıracak esnek seçeneğe sahiptir. Lütfen tüm 775 ve 1156 CPU Fanlarının kullanılamayacağını unutmayın.
14. ASRock XFast RAM, Microsoft® Windows® XP / XP 64-bit ile uyumlu değildir.
15. Enerji Kullanan Ürün anlamına gelen EuP, tamamlanmış sistemler için güç tüketimini tanımlamak için Avrupa Birliği tarafından düzenlenen bir gerekliliktir. EuP'a göre, kapalı mod durumunda tamamlanmış sistemin toplam AC gücü 1,00W altında olmalıdır. EuP standardını karşılamak için, EuP hazır anakart ve EuP hazır güç kaynağı gerekir. Intel'in önerisine göre, EuP hazır güç kaynağının 100 mA akım tüketiminde 5v beklemede güç etkinliği %50'den yüksektir standardını karşılaması gerekir. EuP hazır güç kaynağı seçimi için, daha fazla ayrıntı için güç kaynağı üreticisine başvurmanızı öneririz.

1.3 Jumper'ların Ayarı

Şekilde jumper'ların nasıl ayarlandıkları gösterilmektedir. Jumper kapağı pinler üzerine yerleştirildiğinde jumper "Kapalı" dır. Jumper kapağı pinler üzerindeyken jumper "Açık" tır. Şekilde pin1 ve pin2'si "Kapalı" olan jumper kapağı bu 2 pine yerleştirilmiş 3-pinli jumper gösterilmektedir.



Jumper	Ayar	
CMOS'u temizleme (CLRCMOS1, 3-pinli jumper) (bkz. s.2 No. 21)	1_2 Default	2_3 Clear CMOS

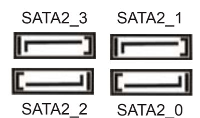
Not: CLRCMOS1, CMOS'daki verilerinizi temizlemenize olanak sağlar. Sistem parametrelerini temizlemek ve varsayılan ayara sıfırlamak için lütfen bilgisayarı kapatın ve güç kablosunun fişini güç kaynağından çekin. 15 saniye bekledikten sonra, pin2 ve pin3'ü CLRCMOS1'de 5 saniye kısaltmak için bir atlatıcı şapkası kullanın. Ancak, BIOS'u güncelledikten hemen sonra lütfen CMOS'u temizlemeyin. BIOS'u güncellemeyi tamamladığınızda CMOS'u temizlemeniz gerekirse, ilk olarak sistemi başlatmanız ve ardından CMOS temizleme işlemini gerçekleştirmeden önce kapatmanız gereklidir. Parola, tarih, saat, kullanıcı varsayılan profili, 1394 GUID ve MAC adresinin yalnızca CMOS pili çıkarıldığında temizleneceğini lütfen aklınızda bulundurunuz.

Türkçe

1.4 Yerleşik Fişler ve Konektörler

Yerleşik fişler ve konektörler jumper DEĞİLDİR. Bu fişlerin ve konektörlerin üzerine jumper kapakları YERLEŞTİRMEYİN. Fişlerin ve konektörlerin üzerine jumper kapakları yerleştirmek anakartın kalıcı olarak zarar görmesine neden olabilir!

Seri ATAII Konektörler
(SATA2_0: bkz. s.2, No. 10)
(SATA2_1: bkz. s.2, No. 8)
(SATA2_2: bkz. s.2, No. 12)
(SATA2_3: bkz. s.2, No. 11)



Bu dört Seri ATAII (SATAII) konektör, dahili depolama cihazları için SATA veri kablolarını destekler. Geçerli SATAII arayüzü 3,0 Gb/sn veri aktarım hızına izin verir.

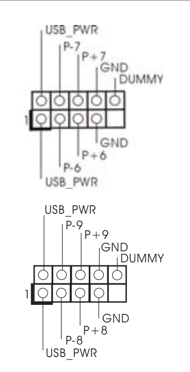
Seri ATA (SATA) Veri Kablosu
(İsteğe bağlı)



SATA veri kablosunu her iki ucu da SATA / SATAII sabit diskine veya anakarttaki SATAII konektörüne bağlanabilir.

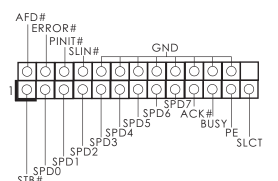
USB 2.0 Fişleri
(9-pinli USB6_7)
(bkz. s.2 No. 15)

(9-pinli USB8_9)
(bkz. s.2 No. 16)



G/Ç panelindeki varsayılan altı USB 2.0 portundan başka, bu anakartta iki USB 2.0 fişi bulunur. Her USB 2.0 fişi iki USB 2.0 portunu destekler.

Yazdırma Portu Fişi
(25-pinli LPT1)
(bkz. s.2 No. 18)

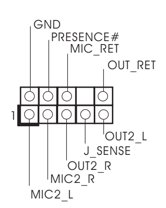


Bu, yazdırma portu kablosu için yazıcı cihazlarının uygun bağlanmasını sağlayan bir arayüzdür.

Ön Panel Ses Fişi

(9-pinli HD_SES1)

(bkz. s.2 No. 19)



Bu, panel ses kablosu için uygun bağlantı sağlayan ve ses cihazlarını kontrol etmeyi sağlayan bir arayüzdür.



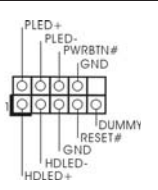
1. Yükse Tanımlı Ses Jak Duyarlılığını destekler, ancak kasadaki panel kablosunun HDA'nın düzgün çalışmasını desteklemesi gerekir. Lütfen sisteminizi yüklemek için kılavuzumuzdaki ve kasa kılavuzundaki talimatları izleyin.
2. AC'97 ses paneli kullanıyorsanız, lütfen ön panel ses fişine aşağıdaki gibi takın:

   A. Mic_IN'i (MIC) MIC2_L'ye bağlayın.
   B. Audio_R'yi (RIN) OUT2_R'ye ve Audio_L'yi (LIN) OUT2_L'ye bağlayın.
   C. Ground'u (GND) Ground'a (GND) bağlayın.
   D. MIC_RET ve OUT_RET yalnızca HD ses paneli içindir. Bunları AC’97 ses paneli için bağlamanız gerekmez.
   E. Ön mikrofonu etkinleştirmek için
   Windows® XP / XP 64-bit İS için:
   "Karıştırıcı"yı seçin. "Kaydedici"yi seçin. Sonra "Ön Mikrofon"u tıklatın.
   Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit İS için:
   Realtek Kontrol panelinde "Ön Mikrofon" Sekmesine gidin. "Kayıt Ses Seviyesi"ni ayarlayın.

Sistem Paneli Fişi

(9-pinli PANEL1)

(bkz. s.2 No. 14)



Bu fiş, birçok sistem ön paneli işlevini barındırır.



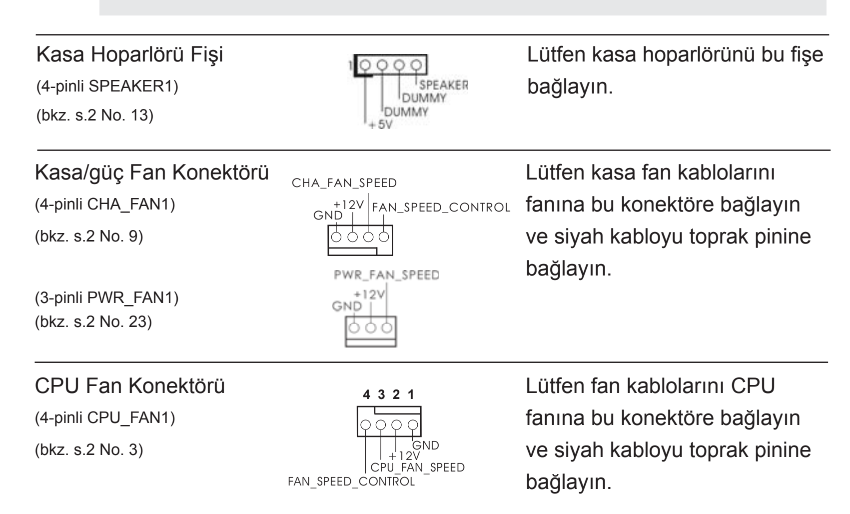
Kasa üzerindeki güç anahtarını, sıfırlama anahtarını ve sistem durumu göstergesini aşağıdaki pin atamalarına göre bu bağlantıya bağlayın. Kabloları bağlamadan önce pozitif ve negatif pinlere dikkat edin.

PWRBTN (Güç Anahtarı):
Kasa üzerindeki güç anahtarını ön panele bağlayın. Güç anahtarını kullanarak sisteminizi kapatma şeklinizi yapılandırabilirsiniz.
RESET (Sıfırlama Anahtarı):
Kasa üzerindeki sıfırlama anahtarını ön panele bağlayın. Bilgisayar donarsa veya normal bir yeniden başlatma gerçekleştirilemezse, bilgisayarı yeniden başlatmak için sıfırlama anahtarına basın.
PLED (Sistem Gücü LED’i):
Kasa üzerindeki güç durumu göstergesini ön panele bağlayın. Sistem çalışırken LED yanar. Sistem S1 uyku modunda iken LED yanıp sön meye devam eder. Sistem S3/S4 uyku modunda veya kapalı (S5) iken LED söner.

Türkçe

HDLED (Sabit Disk Çalışma LED'i):
Kasa üzerindeki sabit disk çalışma LED'ini ön panele bağlayın. Sabit disk veri okurken veya yazarken LED yanar.

Ön panel tasarımı kasaya göre değişiklik gösterebilir. Ön panel modülünde temel olarak güç anahtarı, sıfırlama anahtarı, güç LED'i, sabit disk çalışma LED'i, hoparlör vb. bulunur. Kasa ön panel modülünüzü bu bağlantıya bağlarken, kablo atamalarının ve pin atamalarının doğru biçimde eşleştirildiğinden emin olun.



Kasa Hoparlörü Fişi
(4-pinli SPEAKER1)
(bkz. s.2 No. 13)

Lütfen kasa hoparlörünü bu fişe bağlayın.

Kasa/güç Fan Konektörü
(4-pinli CHA_FAN1)
(bkz. s.2 No. 9)

(3-pinli PWR_FAN1)
(bkz. s.2 No. 23)

Lütfen kasa fan kablolarını fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın.

CPU Fan Konektörü
(4-pinli CPU_FAN1)
(bkz. s.2 No. 3)

Lütfen fan kablolarını CPU fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın.

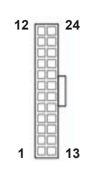


Bu anakart 4-Pinli CPU fan (Sessiz Fan) desteği sağlasa da, 3-Pinli CPU fan hızı kontrol işlevi olmadan bile hala başarılı bir şekilde çalışabilir. 3-Pinli CPU fanı bu konektördeki CPU fan konektörüne bağlamayı planlıyorsanız, lütfen Pin 1-3'e bağlayın.

Pin 1-3 Bağlı

3-Pinli Fanı Takma

ATX Güç Konektörü
(24-pinli ATXPWR1)
(bkz. s.2 No. 4)

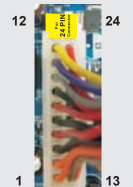


Lütfen bir ATX güç kaynağını bu konektöre bağlayın.

Türkçe



Bu anakart 24-pinli ATX güç konektörü sağlasa da geleneksel bir 20-pinli ATX güç kaynağı bağlarsanız da çalışabilir. 20-pinli ATX güç kaynağını kullanmak için, lütfen güç kaynağınızı Pin 1 ve Pin 13'le birlikte takın.



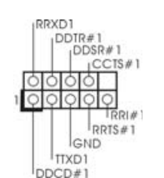
20-Pinli ATX Güç Kaynağını Takma

ATX 12V Güç Konektörü
(4-pinli ATX12V1)
(bkz. s.2 No. 2)



Lütfen bir ATX 12V güç kaynağını bu konektöre bağlayın.

Seri port Fişi
(9-pinli COM1)
(bkz. s.2 No. 17)



Bu COM1 fişi bir seri port modülünü destekler.

2. BIOS Bilgileri

Anakarttaki Flash Bellek BIOS Ayarları Yardımcı Programını içerir. Bilgisayarı başlattığınızda, lütfen Otomatik Güç Sınaması (POST) sırasında BIOS Ayarları yardımcı programına girmek için <F2> veya <Del> tuşuna basın; aksi halde, POST test rutinlerine devam eder. BIOS Ayarlarına POST'tan sonra girmek istiyorsanız, lütfen <Ctl> + <Alt> + <Delete> tuşlarına basarak veya sistem kasasındaki sıfırlama düğmesine basarak sistemi yeniden başlatın. BIOS Ayarları programı kullanıcı dostu olacak şekilde tasarlanmıştır. Çeşitli alt menüler arasında dolaşmanıza ve önceden belirlenen seçenekler arasından seçim yapmanıza izin veren menü tabanlı bir programdır. BIOS Ayarları hakkında ayrıntılı bilgi için, lütfen Destek CD'sinde bulunan Kullanıcı Kılavuzu'na (PDF dosyası) başvurun.

3. Yazılım Destek CD'si bilgileri

Bu anakart çeşitli Microsoft® Windows® işletim sistemleri destekler: 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Anakartla birlikte gelen Destek CD'si anakart özelliklerini genişleten gerekli sürücüleri ve kullanışlı yardımcı programları içerir. Destek CD'sini kullanmaya başlamak için, CD'yi CDROM sürücünüze takın. Bilgisayarınızda "OTOMATİK KULLAN" özelliği etkinleştirilmişse, Ana Menüyü otomatik olarak görüntüler. Ana Menü otomatik olarak görüntülenmezse, menüleri görüntülemek için Destek CD'sinin "BIN" klasöründeki "ASSETUP.EXE" dosyasını bulun ve çift tıklatın.

Türkçe

1. Penjelasan

Terimakasih untuk membeli papan induk penghasilan kontrol kualitas keras terus-menerus ASRock's yang dapat dipercaya. Dia dapat menyajikan pertunjukan baik dengan bentuknya sesuai dengan janji kualitas dan ketahanan ASRock's.
Buku Pedoman Instalasi Cepat ini mengandung perkenalan papan induk dan instalasi langkah-demi-langkah. Informasi lebih terperinci tentang papan induk ini dapat dilihat dalam buku tangan pemakai dalam Support CD.



Karena spesifikasi papan induk dan software BIOS barangkali dapat diperbarui, isi dalam buku pedoman ini akan mengikuti perubahan tanpa peringatan. Dalam kondisi terjadinya modifikasi buku pedoman ini, versi baru akan diperlihatkan dalam website ASRock tanpa peringatan lebih. Anda dapat mendapatkan kartu-kartu yang paling baru dan daftar bantuan CPU pada website ASRock.
Website ASRock http://www.asrock.com

1.1 Isi Paket

Papan Induk ***H71M-DG3*** ASRock
(Faktor Form Mikro ATX: 8.9-in x 6.8-in, 22.6 cm x 17.3 cm)
Pemimpin Instalasi Cepat ***H71M-DG3*** ASRock
Support CD ***H71M-DG3*** ASRock
2 x Kabel satu serial Data ATA (SATA) (bebas-pilih)
1 x Satu Pelindung I/O

Bahasa Indonesia

1.2 Spesifikasi

Podium	- Faktor Form Mikro ATX: 8.9-in x 6.8-in, 22.6 cm x 17.3 cm - Desain All Solid Capacitor
CPU	- Mendukung Intel® Core™ i7 / i5 / i3 Generasi Ke-3 dan Ke-2 dalam Paket LGA1155 - Menggunakan Teknologi Intel® Turbo Boost 2.0 - Mendukung CPU K-Series jenis “unlocked” - Menggunakan Teknologi Hyper-Threading
Grup Chip	- Intel® H61 - Mendukung Intel® Rapid Start Technology dan Smart Connect Technology
Ingatan	- Teknologi ingatan DDR3 dwisaluran - 2 x Alur DDR3 DIMM - Mendukung memori DDR3 1600/1333/1066 non-ECC yang tidak di-buffer (DDR3 1600 dengan Intel® Ivy Bridge CPU, DDR3 1333 dengan Intel® Sandy Bridge CPU) - Kapasitas paling banyak: 16GB - Mendukung Intel® Extreme Memory Profile (XMP) dengan Intel® Ivy Bridge CPU
Alur Ekspansi	- 1 x slot PCI Express 3.0 x16 (biru @ x16 mode) * PCIE 3.0 hanya didukung dengan Intel® Ivy Bridge CPU. Dengan Intel® Sandy Bridge CPU, hanya PCIE 2.0 yang didukung. - 1 x PCI Express 2.0 x1 slot
Diagram	* Intel® HD Graphics Built-in Visual dan output VGA hanya dapat didukung dengan prosesor yang mengintegrasikan GPU. - Mendukung Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 dengan Intel® Ivy Bridge CPU - Mendukung Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) dengan Intel® Sandy Bridge CPU - Pixel Shader 5.0, DirectX 11 dengan Intel® Ivy Bridge CPU, Pixel Shader 4.1, DirectX 10.1 dengan Intel® Sandy Bridge CPU - Ingatan sama Max. 1760MB dengan Intel® Ivy Bridge CPU. Ingatan sama Max. 1759MB dengan Intel® Sandy Bridge

Bahasa Indonesia

	CPU. - Output VGA Ganda: mendukung port DVI-D dan D-Sub melalui pengontrol tampilan independen - Mendukung DVI dengan resolusi maksimal hingga 1920x1200 @ 60Hz - Mendukung D-Sub dengan resolusi maksimal hingga 2048x1536 @ 75Hz - Mendukung fungsi HDCP dengan port DVI - Mendukung pemutaran 1080p Blu-ray (BD) / HD-DVD dengan port DVI
Audio	- 5.1 CH HD Audio (Realtek ALC662 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111C - Menggunakan Wake-On-LAN - Mendukung PXE
Papan Belakang I/O	I/O Panel - 1 x Port Mouse PS/2 - 1 x Port Keyboard PS/2 - 1 x Port D-Sub - 1 x Port DVI-D - 6 x Port USB 2.0 siap-dipakai - 1 x RJ-45 LAN Port LED (ACT/LINK LED dan SPEED LED) - HD Audio Jack: Line in/Penyuara Depan/mikropon
Penghubung	- 4 x penghubung SATA2 3.0Gb/s, dapat menggunakan NCQ, AHCI dan fungsi "Hot Plug" - 1 x port header Print - 1 x port header COM - Penghubung KIPAS CPU/casis/power - Penghubung power 24 pin ATX - Penghubung power 4 pin 12V - Penghubung audio panel dapan - 2 x USB 2.0 header (menggunakan 4 port USB 2.0)
Ciri-ciri BIOS	- 32Mb AMI Legal BIOS - AMI UEFI Legal BIOS dengan dukungan GUI - Menggunakan "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Menggunakan jumperfree - Penyokong AMBIOS 2.3.1 - Penyesuaian berbagai tegangan IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA

Sokongan CD	- Driver, Utilitas, Perangkat Lunak Antivirus (Versi Percobaan), CyberLink MediaEspresso 6.5 Versi Percobaan, Creative Sound Blaster X-Fi MB - Trial, ASRock MAGIX Multimedia Suite - OEM
Fitur Unik	- ASRock Extreme Tuning Utility (AXTU) - ASRock Instant Boot - ASRock Instant Flash - ASRock APP Charger - ASRock SmartView - ASRock XFast USB - ASRock XFast LAN - ASRock XFast RAM - Hybrid Booster: - ASRock U-COP - Penjaga kegagalan input (B.F.G.) - Combo Cooler Option (C.C.O.)
Penjaga Hardware	- Perasa Suhu CPU - Perasa Suhu Casis - Pengukur Kipas CPU/casis/power - Kipas CPU/Sasis Senyap (Kecepatan Kipas Sasis Otomatis Disesuaikan Berdasarkan Temperatur CPU) - Kontrol Multi-Kecepatan Kipas CPU/casis - Penjagaan voltasi: +12V, +5V, +3.3V, Vcore
OS	- dapat digunakan Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Sertifikasi	- FCC, CE, WHQL - ErP/EuP Ready (memerlukan catu daya ErP/EuP ready)

* Untuk informasi rinci, silakan kunjungi website kami: http://www.asrock.com

Bahasa Indonesia

Installing OS on a HDD Larger Than 2TB

This motherboard is adopting UEFI BIOS that allows Windows® OS to be installed on a large size HDD (>2TB). Please follow below procedure to install the operating system.

1. Please make sure to use **Windows® Vista™ 64-bit (with SP1 or above)** or **Windows® 7 64-bit**.
2. Press <F2> or <Delete> at system POST. Set **AHCI Mode** in UEFI Setup Utility > Advanced > Storage Configuration > SATA Mode.
3. Choose the item **"UEFI:xxx"** to boot in UEFI Setup Utility > Boot > Boot Option #1. ("xxx" is the device which contains your Windows® installation files. Normally it is an optical drive.) You can also press <F11> to launch boot menu at system POST and choose the item **"UEFI:xxx"** to boot.
4. Start Windows® installation.
5. If you install **Windows® 7 64-bit** OS, OS will be formatted by GPT (GUID Partition Table). Please install the hotfix file from Microsoft®: http://support.microsoft.com/kb/979903